

GEORGE WRAGGE

WARDRY: METAL
WORKS
SALFORD
MANCHESTER:



209 & 211: SHAFTESBURY
AVENUE:
OXFORD: LONDON: W.C.



METAL: CASEMENTS
AND
FRAMES WROUGHT: IRON

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441

Printed by
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Please place this list in Catalogue for future reference.

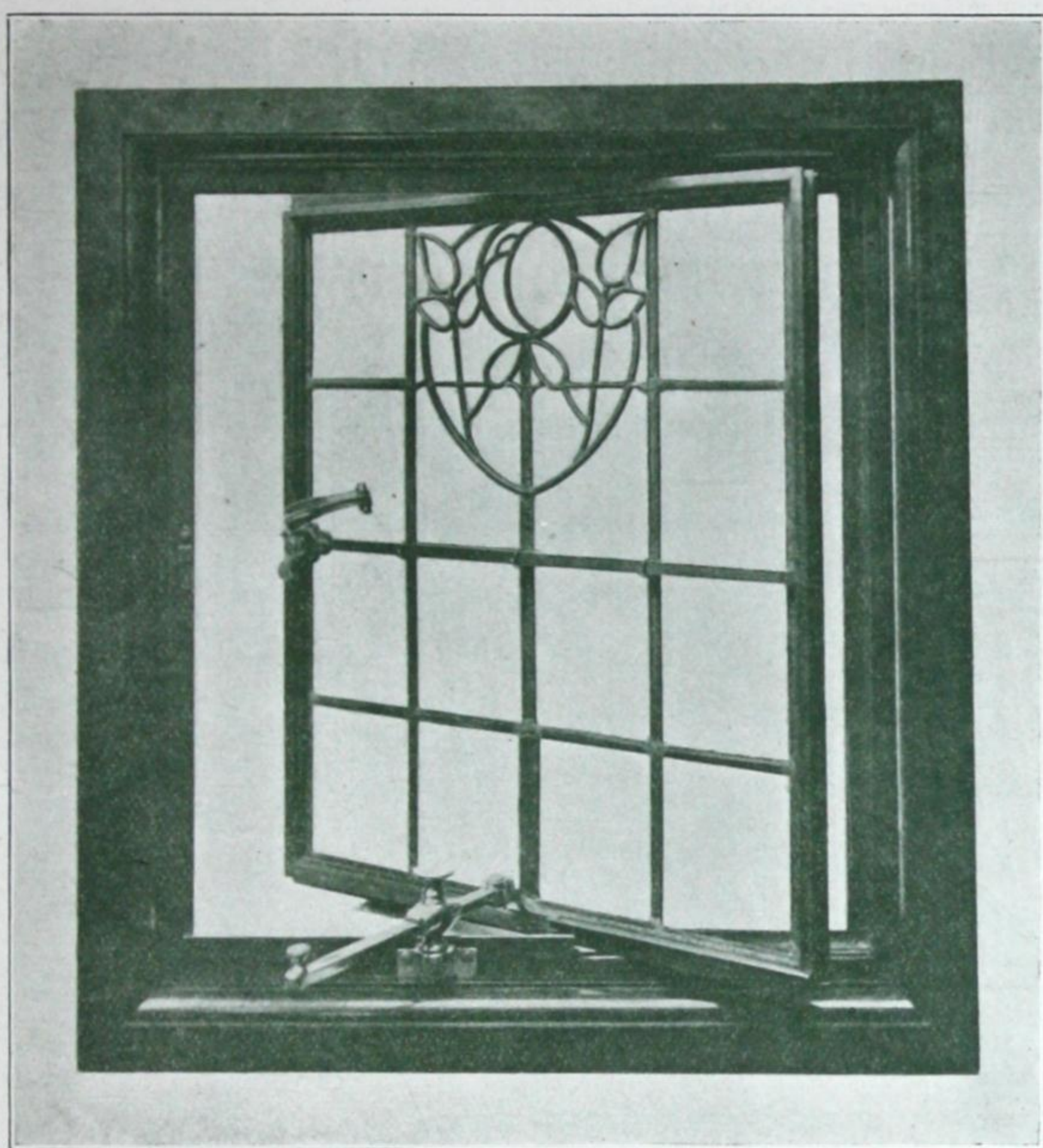
GEORGE WRAGGE, LTD.

WARDRY METAL WORKS & THE CRAFTS (STAINED AND LEADED GLASS), SALFORD, MANCHESTER.

Telegrams: "Casements, Manchester." Telephone No. 2206.

LONDON SHOWROOM: 211, SHAFTESBURY AVENUE, W.C.

London Telephone: No. 1233, Central.



IN AND OUT CASEMENT FOR SAFETY CLEANING.

Recently adopted in open competition by H. M. Office of Works for the Land Registry New Office Block.

The illustrations show the casement partially open for Ventilation and wide open for SAFETY CLEANING.

ADVANTAGES.

The casement being hung 4in. from the jamb enables the glass to be cleaned with perfect safety from inside and also the fixed glass on either side in the case of a three-light window.

No interference with curtains, blinds, &c.

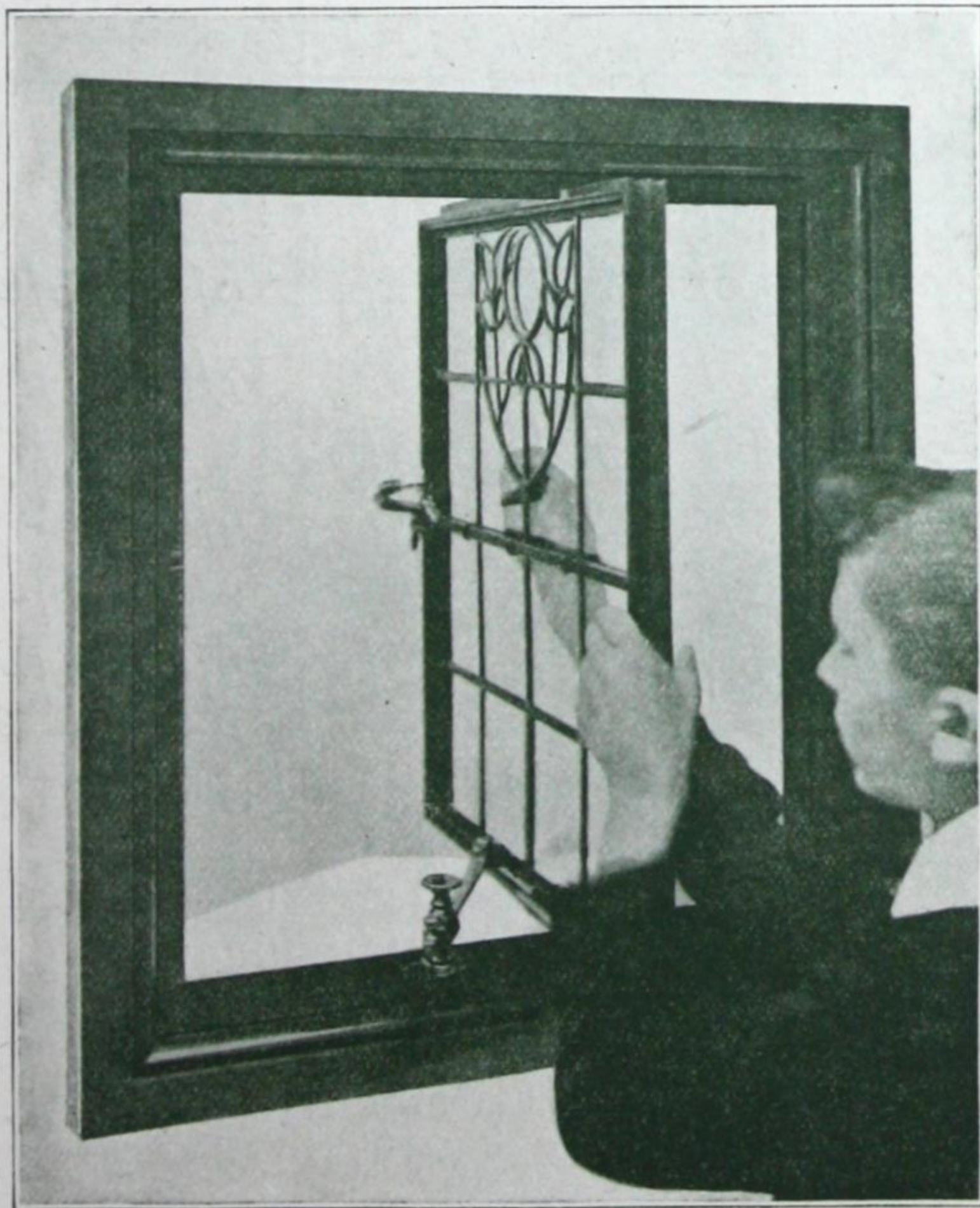
No loose slips, bolts or parts to get out of order.

No special rebates.

Costs very little more than an ordinary side hung casement.

Full information, prices and details of the sections are given on the inner pages.

On the back page will be found an illustration of a Ventilator designed by Mr. C. F. A. Voysey, Architect, and an adaptation of our own for top hung lights.



GEORGE WRAGGE, LTD.

WARDRY METAL WORKS & THE CRAFTS (STAINED GLASS AND LEADED LIGHTS), SALFORD, MANCHESTER.

CASEMENTS AND FRAMES of No. 32 SECTION, in steel, (see opposite page), hung top and bottom, opening IN AND OUT FOR SAFETY CLEANING, GUARANTEED WEATHERTIGHT.

ADVANTAGES. The casement being hung about 4in. from the jamb enables the glass to be cleaned with perfect safety from inside and also the fixed glass on either side the casement in the case of a three-light window (see illustrations). NO LOOSE SLIPS OR PARTS TO GET OUT OF ORDER.

Is fitted and works as an ordinary side hung casement.

The same rebates apply for casements to fall back from cill, to push out from head or to swing on centres horizontally.

SPECIFICATION of fittings is the same as that given in Catalogue, page 8, and the same "extras" will apply as for section No. 21, page 34, excepting the item for iron saddle bars, which latter are now 8d. each.

No. 1 QUALITY FITTINGS. All Coinage Metal, polished.

No. 2 " " All Coinage Metal, plainly filed.

No. 3 " " Iron, with Coinage Metal parts.

No. 32 SECTION CASEMENT.					Fixed Lights.		
Height.	Width.	Quality 1.	Quality 2.	Quality 3.	Same section as the Casements.	Of a section giving same sightline & same plane of glass as Casements.	Angle Iron
2ft. and under - -	2ft. & under	49/6	47/-	45/-	20/-	15/-	5/6
Above 2ft. & under 2ft. 6in.	" "	51/-	48/6	46/6	21/-	15/6	6/-
2ft. 6in. and under 3ft. -	" "	52/6	50/-	48/-	22/-	16/-	6/6
3ft. and under 3ft. 6in.	" "	54/6	52/-	50/-	23/-	17/-	7/-
3ft. 6in. and under 4ft.	" "	56/6	54/-	52/-	24/-	18/-	8/-
4ft. and under 4ft. 6in.	" "	58/6	56/-	54/-	25/-	19/-	9/-
4ft. 6in. and under 5ft.	" "	69/6	67/-	65/-	27/-	20/-	10/-
5ft. and up to 6ft. - -	" "	73/-	70/6	68/6	30/-	22/6	12/-

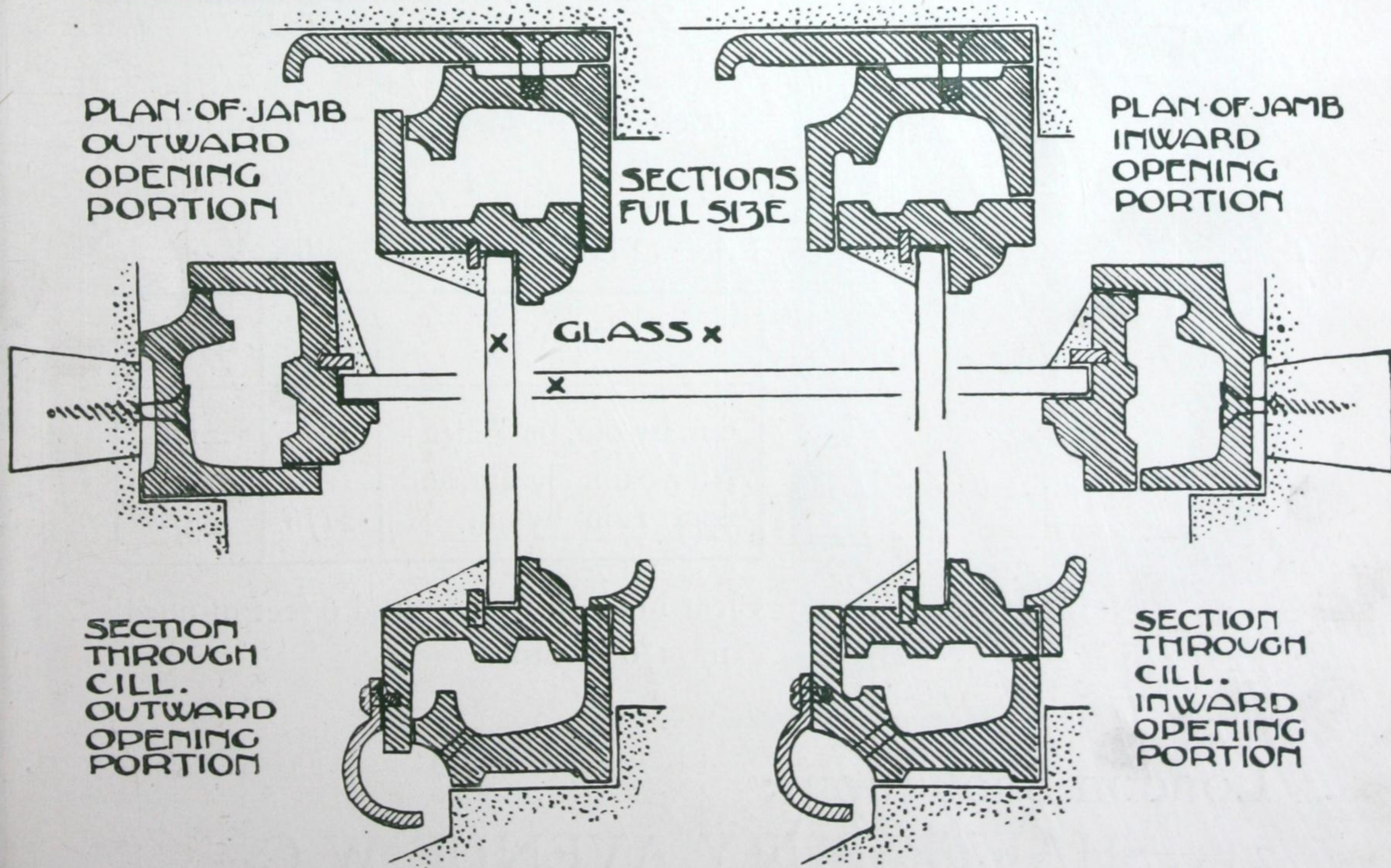
Casements over 6ft. high will be specially quoted for, they can with safety be made up to 10ft.

For comparison of prices of the various sections made see Catalogue pages 32 and 33. For designs of fittings see pages 37 to 47.

Special quotations will be given for the IN and OUT Casements in Bronze.

GEORGE WRAGGE & CO

Wardry·works·&·the·crafts·Manchester
London·211·shaftesbury·avenue·w.c.

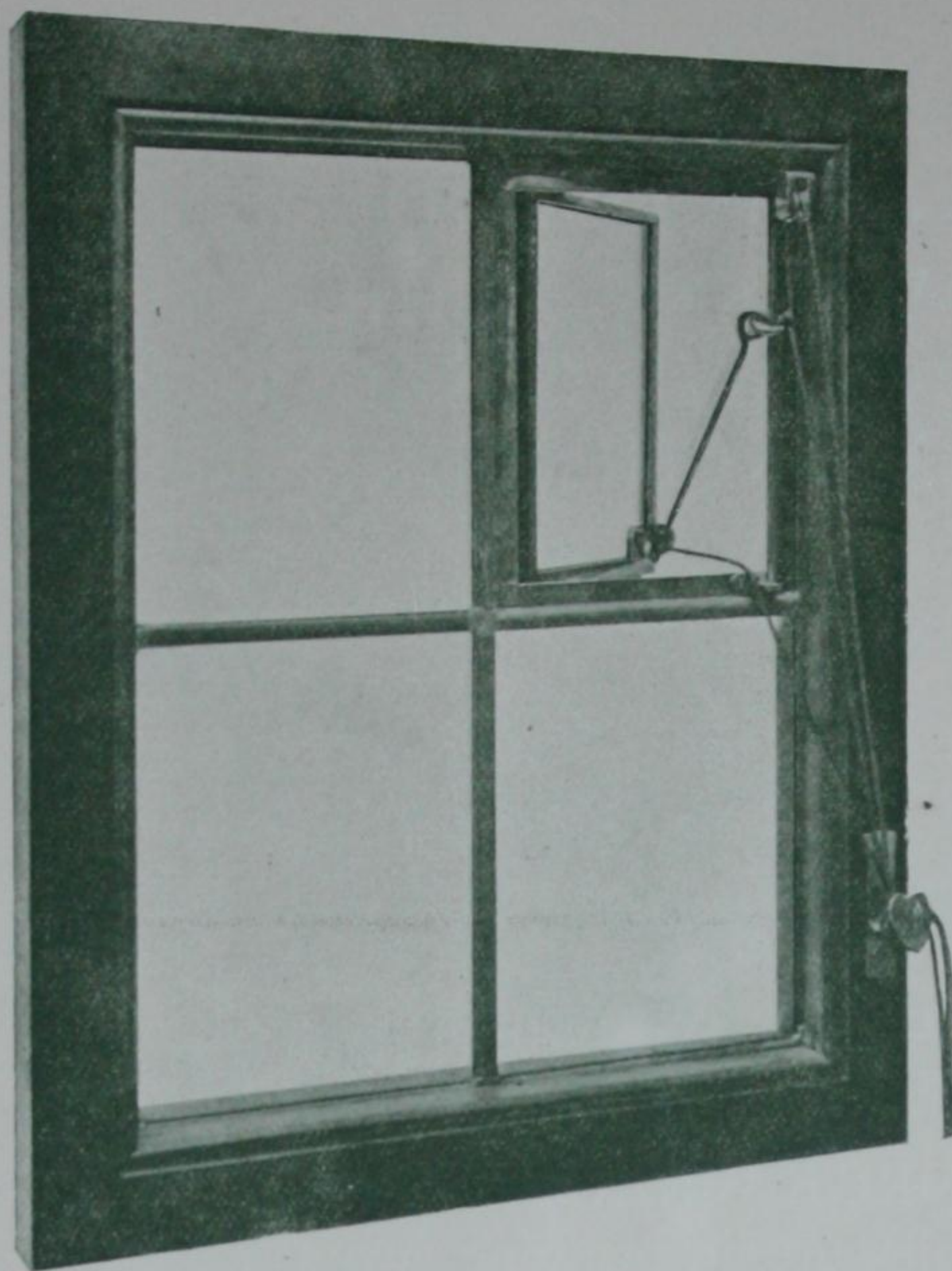


“IN·&·OUT·CASEMENT·FOR·SAFETY·CLEANING.”
registered · sections

GEORGE WRAGGE, LTD.

WARDRY METAL WORKS & THE CRAFTS (STAINED
AND LEADED GLASS), SALFORD, MANCHESTER.

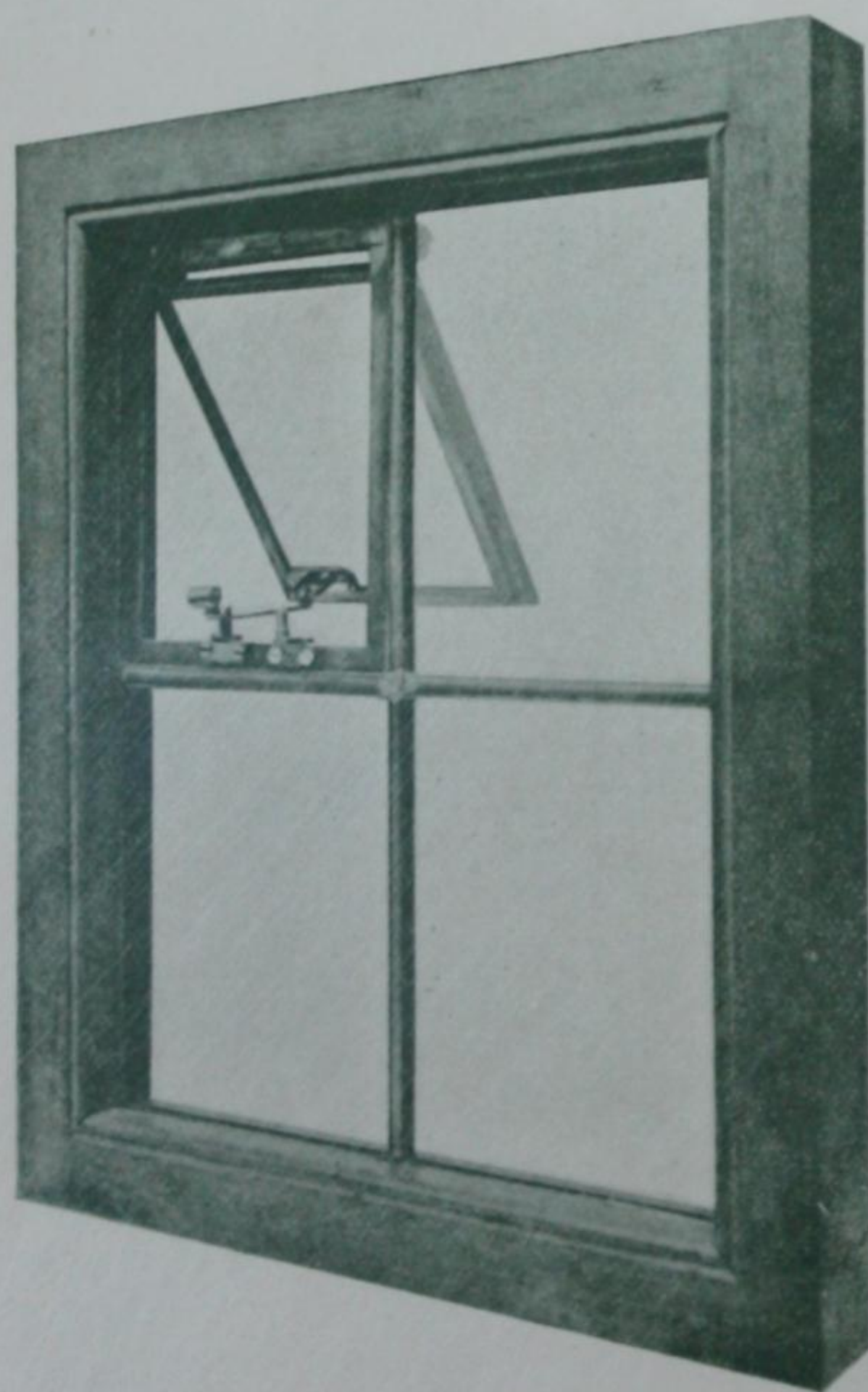
No. V 36



This Ventilator is glazed into leaded lights as illustrated, but it can as readily be fixed into stone, wood or other material. It is weathertight, non-corrosive (being made of brass or bronze), and economical where ventilation only is required, dispensing with Casements full size of the openings.

We have purchased the copyright from Mr. C. F. A. Voysey, Architect, and it is with his entire approval that we bring these Ventilators to your notice.

No. V 37



This illustration is an adaptation of our own for top hung Ventilators within reach.

• •

Models will be forwarded on application.

• •

Prices of both forms of Ventilators.

Sizes.	Brass	Bronze
9in. by 6in. or under -	20/-	21/6
Above 9in. by 6in. and up to 12in. by 9in.	21/6	23/-

Cleat hook in bronze and 6 feet of cord, extra, 1/6 inclusive.

• •

London Showroom:
211, SHAFTESBURY AVENUE, W.C.

Please place this list in Catalogue for future reference.

GEORGE WRAGGE, LTD.
WARDRY METAL WORKS & THE
CRAFTS (STAINED AND LEADED GLASS),
SALFORD, MANCHESTER.

London Showroom : 211, Shaftesbury Avenue, W.C.

Telegrams: "Casements, Manchester."
Telephone No. 2206.

London Telephone:
No. 1233, Central.

Salford, Manchester,
May, 1903.



MESSRS. GEORGE WRAGGE, Ltd.
have much pleasure in bringing two
further CASEMENT SECTIONS to
your notice; they are illustrated and
fully priced on other side, along with
their "WARDRY" CASEMENT,
introduced some twelve months ago. For leaded glazing
and where a flat appearance on the outside is required,
the latter casement is largely used. The new Sections now
introduced, one opening inwards, the other outwards, are
for weathertight casements very economical in price, and
take up little daylight. Strengthening ribs are rolled on
the Sections solid and also the Condensation Channels
at the cills; they are Sections which can be strongly
recommended.

Please refer to back page.

GEORGE WRAGGE, LTD.

WARDRY METAL WORKS & THE CRAFTS (STAINED AND LEADED GLASS), SALFORD, MANCHESTER.

LONDON SHOWROOM: 211, SHAFTESBURY AVENUE, W.C.

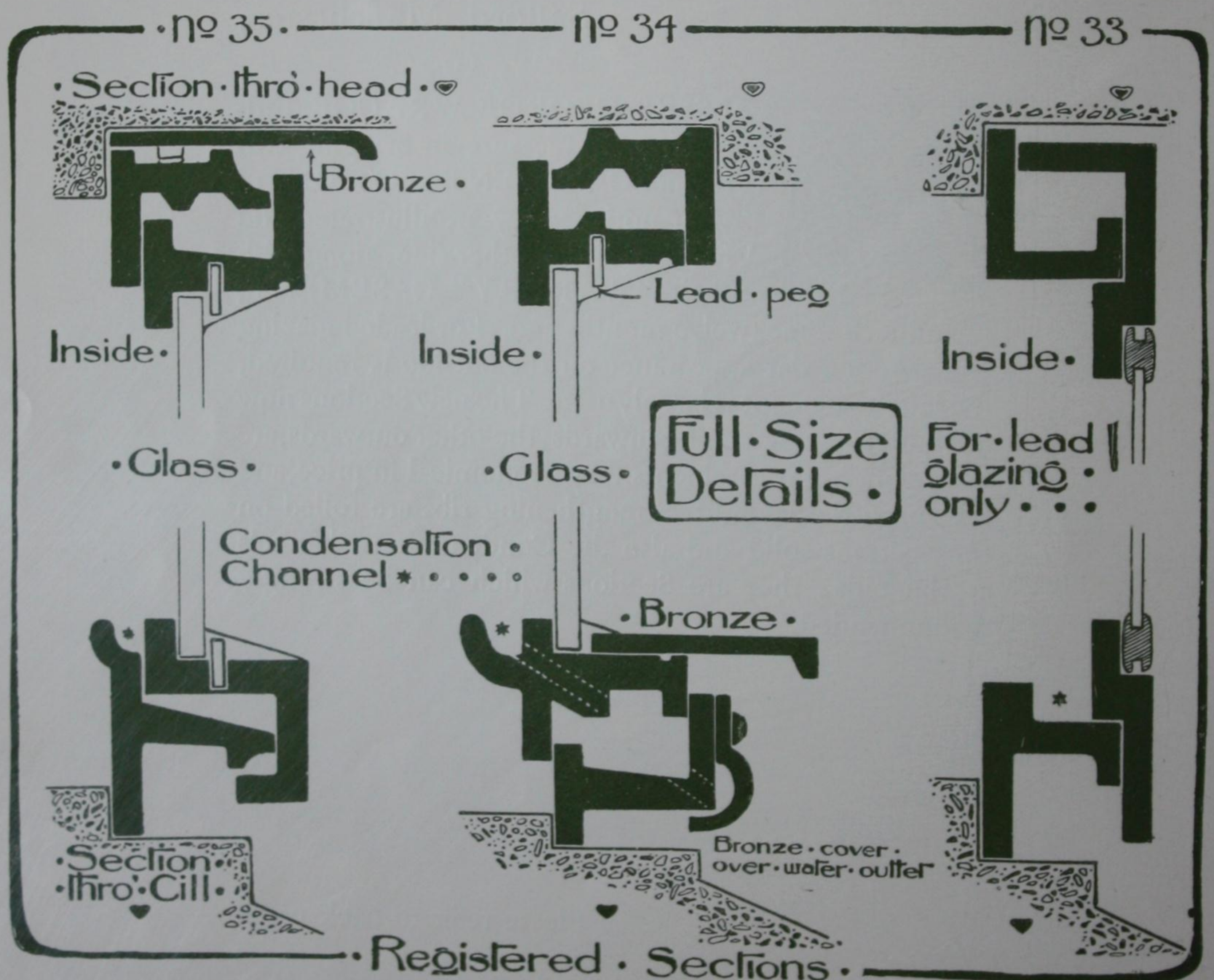
METAL CASEMENTS, in Steel and Bronze.

No. 33 SECTION, hung at side to open OUTWARDS, either singly or in pairs, for leaded glazing only.

No. 34 SECTION, hung at side, opening INWARDS, either singly or in pairs, and also to FALL BACK from cill.

No. 35 SECTION, hung at side, opening OUTWARDS, either singly or in pairs, and also hung at head to push out.

REGISTERED SECTIONS AND GUARANTEED WEATHERTIGHT.



For prices see next page.

GEORGE WRAGGE, LTD.
WARDRY METAL WORKS & THE CRAFTS (STAINED
AND LEADED GLASS,) SALFORD, MANCHESTER.

LONDON SHOWROOM: 211, SHAFTESBURY AVENUE, W.C.

No. 1 quality fittings are in Coinage Metal, highly polished or toned.
No. 2 „ „ are plainly filed Coinage Metal.
No. 3 „ „ are in Iron, with Coinage Metal working parts.
The prices below are for Casements in one square and with square heads. The extras for saddle bars, groove bars, shaped heads, &c. can be got from our general Catalogue.

Side Hung Casements, hung singly, and Fixed Lights.

Height.	Width.	Side Hung Casements.									Fixed Lights.		
		No. 33 Section.			No. 34 Section.			No. 35 Section.			Same plane of glass and same sight line as Casements.		
		Qual. 1.	Qual. 2.	Qual. 3.	Qual. 1.	Qual. 2.	Qual. 3.	Qual. 1.	Qual. 2.	Qual. 3.	No. 33 Sec.	No. 34 Sec.	No. 35 Sec.
2ft. and under - - -	2ft. & under	30/-	28/6	26/6	29/6	28/-	26/-	29/6	28/-	26/-	12/-	10/6	10/6
Above 2ft. and under 2ft. 6in.	„ „	31/-	29/6	27/6	30/6	29/-	27/-	30/6	29/-	27/-	12/6	11/-	11/-
2ft. 6in. and under 3ft.	„ „	32/6	31/-	29/-	31/6	30/-	28/-	31/6	30/-	28/-	13/-	11/6	11/6
3ft. and under 3ft. 6in.	„ „	34/-	32/6	30/6	32/6	31/-	29/-	32/6	31/-	29/-	14/-	12/6	12/6
3ft. 6in. and under 4ft.	„ „	35/6	34/-	32/-	33/6	32/-	30/-	33/6	32/-	30/-	15/-	13/6	13/6
4ft. and under 4ft. 6in.	„ „	37/-	35/6	33/6	35/6	34/-	32/-	35/6	34/-	32/-	16/-	14/6	14/6
4ft. 6in. and up to 5ft. -	„ „	38/6	37/-	35/-	37/6	36/-	34/-	37/6	36/-	34/-	17/-	15/6	15/6

Side Hung Casements, hung in pairs (without centre fixed rail), and Fixed Lights.

Height.	Width.	Side hung Casements.									Fixed Lights.		
		No. 33 Section.			No. 34 Section.			No. 35 Section.			No. 33 Sec.	No. 34 Sec.	No. 35 Sec.
		Qual. 1.	Qual. 2.	Qual. 3.	Qual. 1.	Qual. 2.	Qual. 3.	Qual. 1.	Qual. 2.	Qual. 3.			
2ft. and under - - -	4ft. & under	62/6	59/6	55/6	61/6	58/6	54/6	61/6	58/6	54/6	19/-	16/-	16/-
Above 2ft. and under 2ft. 6in.	„ „	65/-	61/6	57/6	63/6	60/6	56/6	63/6	60/6	56/6	20/-	17/-	17/-
2ft. 6in. and under 3ft.	„ „	67/6	64/6	60/6	65/6	62/6	58/6	65/6	62/6	58/6	21/-	18/-	18/-
3ft. and under 3ft. 6in.	„ „	70/6	67/6	63/6	67/6	64/6	60/6	67/6	64/6	60/6	23/-	20/-	20/-
3ft. 6in. and under 4ft.	„ „	73/6	70/6	66/6	69/6	66/6	62/6	69/6	66/6	62/6	25/-	22/-	22/-
4ft. and under 4ft. 6in.	„ „	76/6	73/6	69/6	73/6	70/6	66/6	73/6	70/6	66/6	27/-	24/-	24/-
4ft. 6in. and up to 5ft.	„ „	79/6	76/6	72/6	77/6	74/6	70/6	77/6	74/6	70/6	29/-	26/-	26/-

Top and Bottom Hung Casements.

Height.	Width.	No. 33 Section.			No. 34 Section.		No. 35 Section.		
		Hung at head to push out.			Hung at sill to fall back.		Hung at head to push out.		
		Quality 1.	Quality 2.	Quality 3.	Quality 1.	Quality 2.	Quality 1.	Quality 2.	Quality 3.
2ft. and under - - -	2ft. & under	25/3	24/3	23/6	26/-	23/6	25/3	24/3	23/6
Above 2ft. and up to 2ft. 6in.	„ „	26/3	25/3	24/6	27/-	24/6	26/3	25/3	24/6
Above 2ft. 6in. and up to 3ft.	„ „	27/3	26/3	25/6	28/-	25/6	27/3	26/3	25/6

See next page.

GEORGE WRAGGE, LIMITED.

WARDRY METAL WORKS AND THE CRAFTS
(STAINED & LEADED GLASS), SALFORD, MANCHESTER.
LONDON SHOWROOM: 211, SHAFTESBURY
AVENUE, W.C.



A corner of our London Showroom.

Metal Work, wrought and cast, for
Ecclesiastical and Domestic wants.

Gates, Railings, Vanes, Grates, Lecterns,
Crosses, Altar Rails and Communion
Plate.

Gas and Electric Light Fittings.

Memorial Tablets.

Repoussé Work.

Jewellery and Enamels.

Medals awarded at Paris, 1900, for our only Exhibits, Stained Glass and Metal
Casements.

Metal Casements, Sashes and Window
Opening Gear.

Stained and Leaded Glass.

Gesso, Mosaic, Woodwork, Furniture
Decoration.

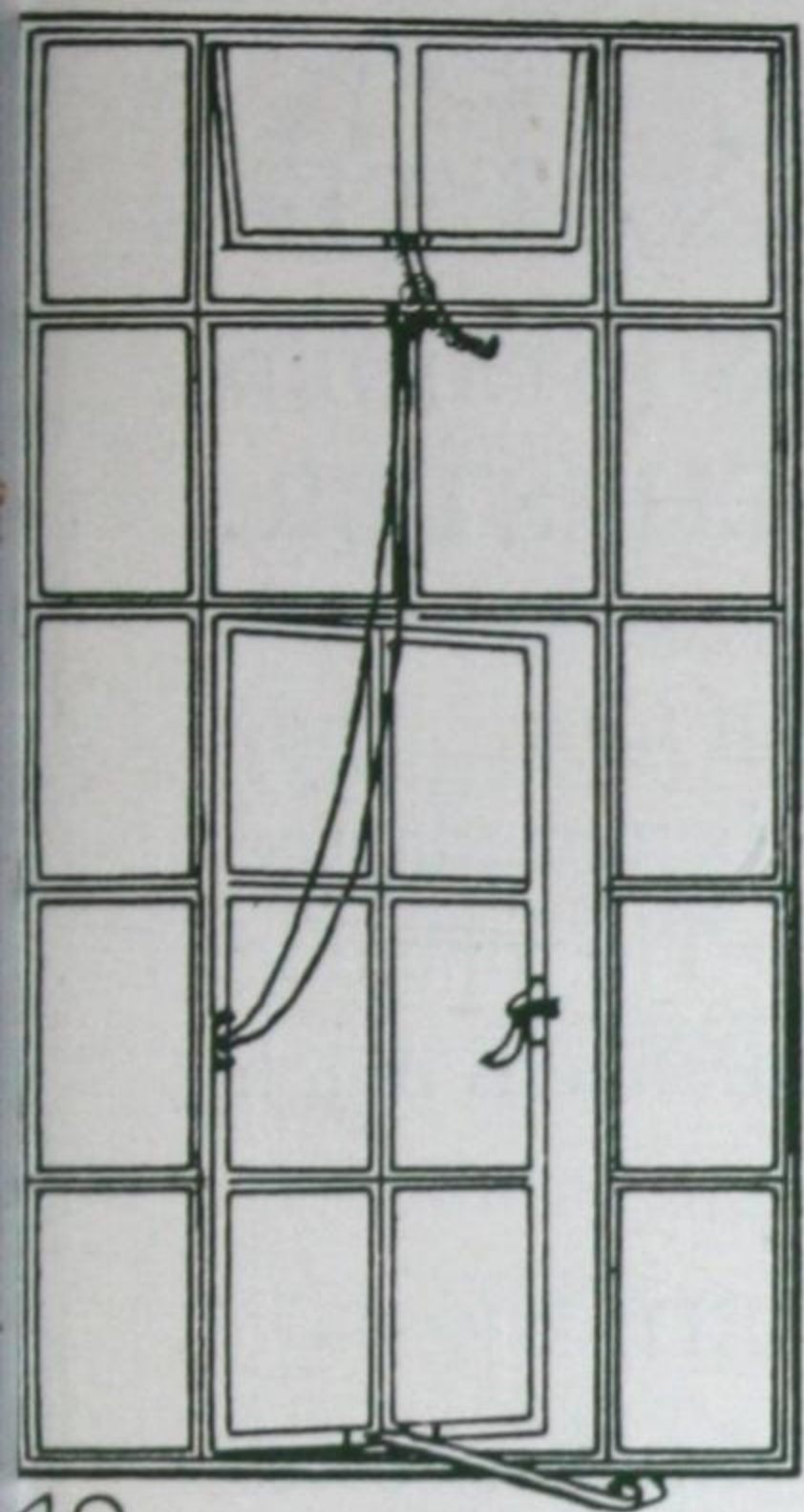
Figure Modellers and Casters.

Castings, light and heavy, in Bronze,
Silver and other Metals.

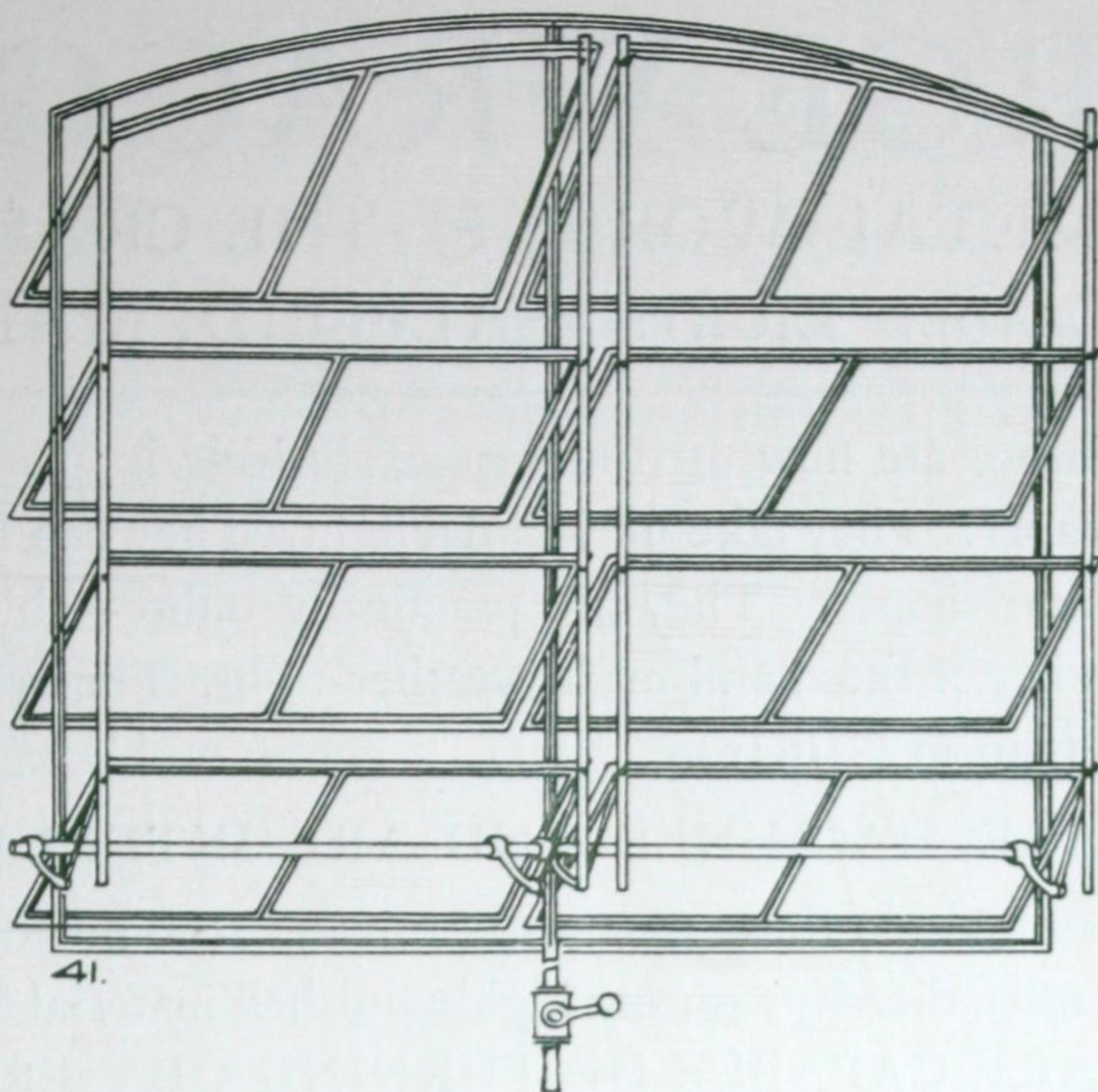
Leadwork, Cast Gutters, Downpipes,
Heads, Garden Vases, Fonts, &c.

GEORGE WRAGGE LTD

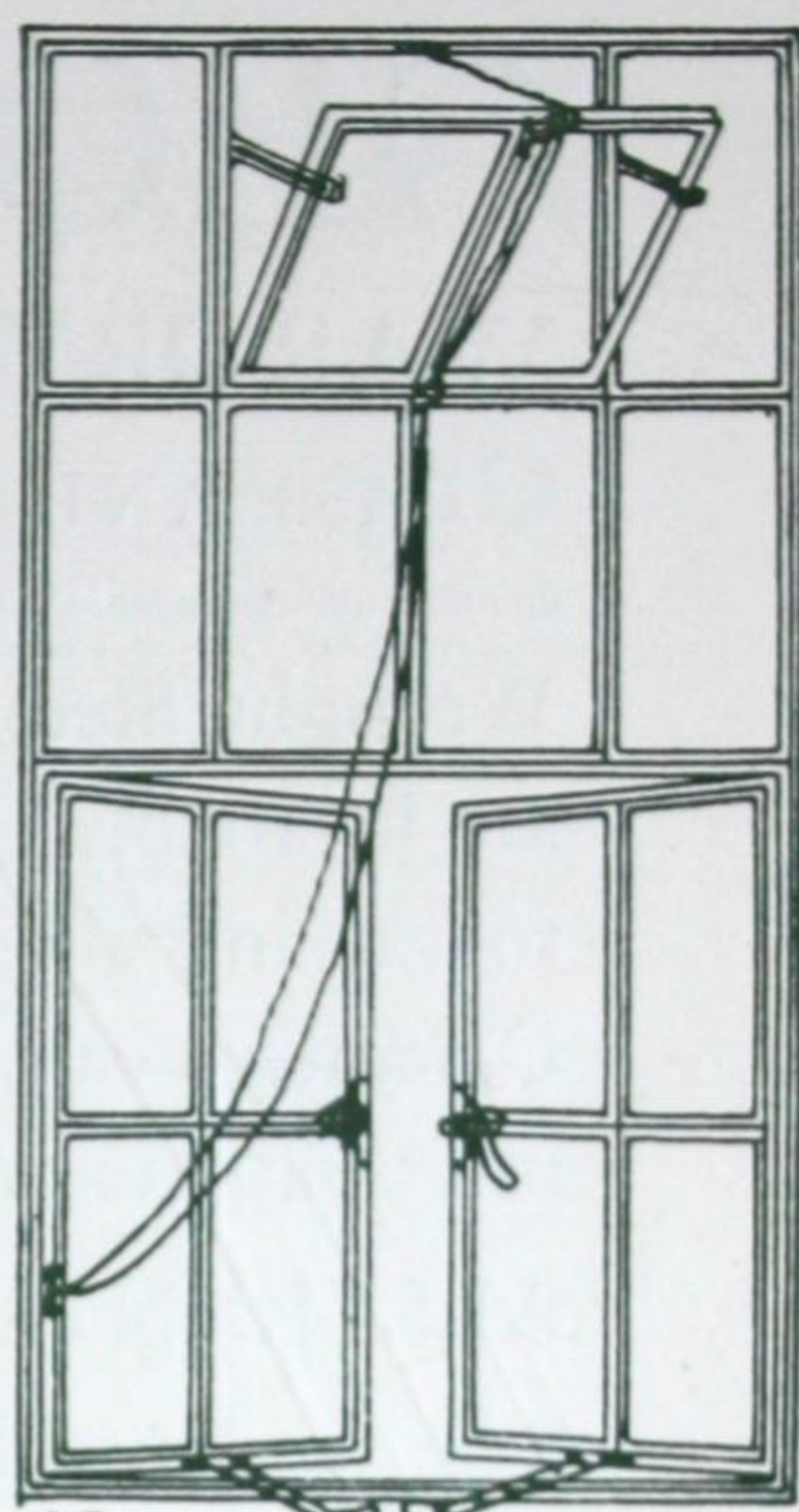
WARDRIY·WORKS·AND·THE·CRAFTS·MANCHESTER·
TELEGRAMS·CASEMENTS·MANCHESTER·PHONE·2206:



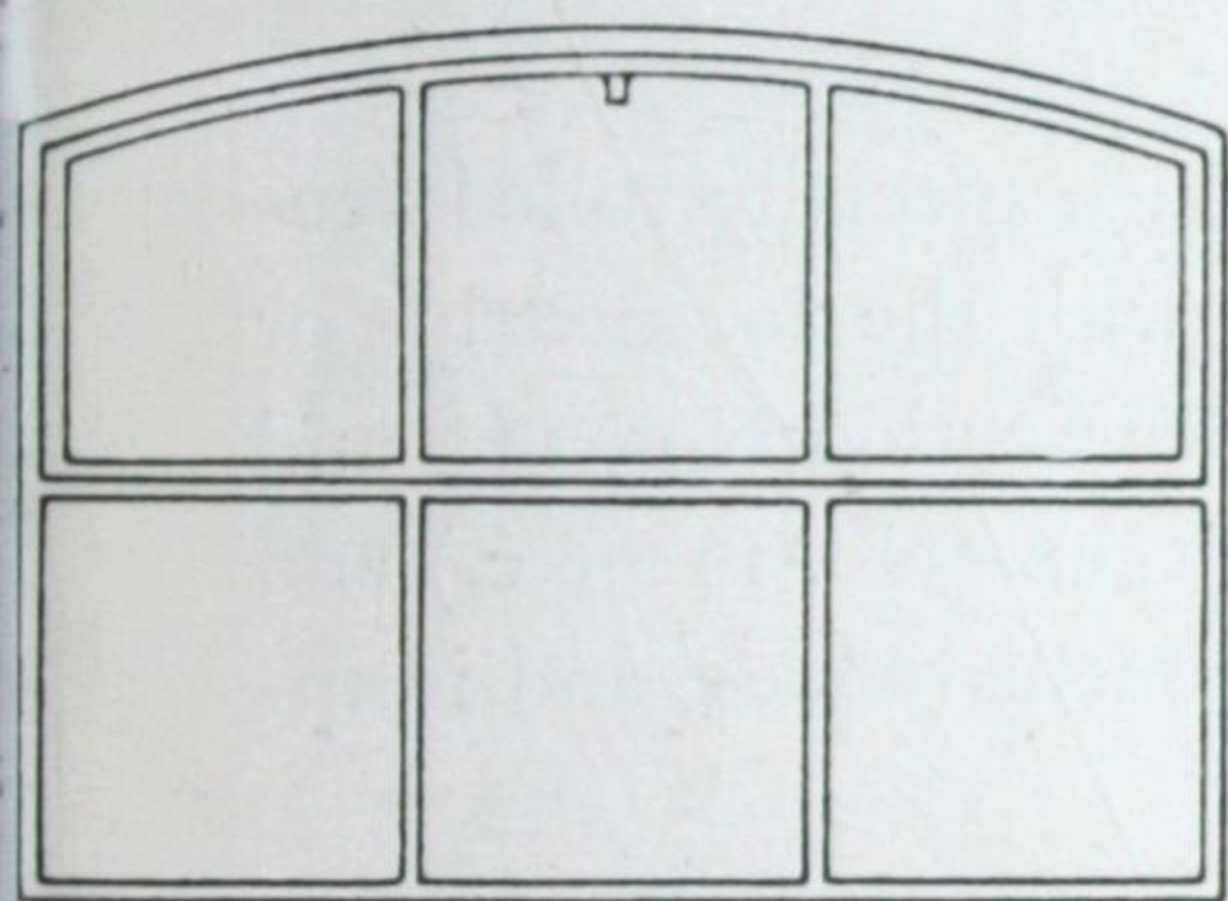
40.
HALF INCH SCALE



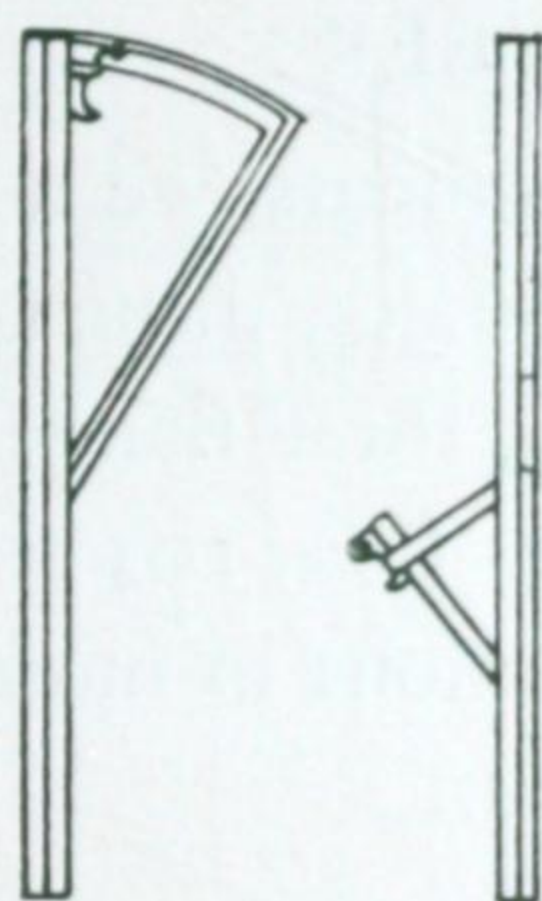
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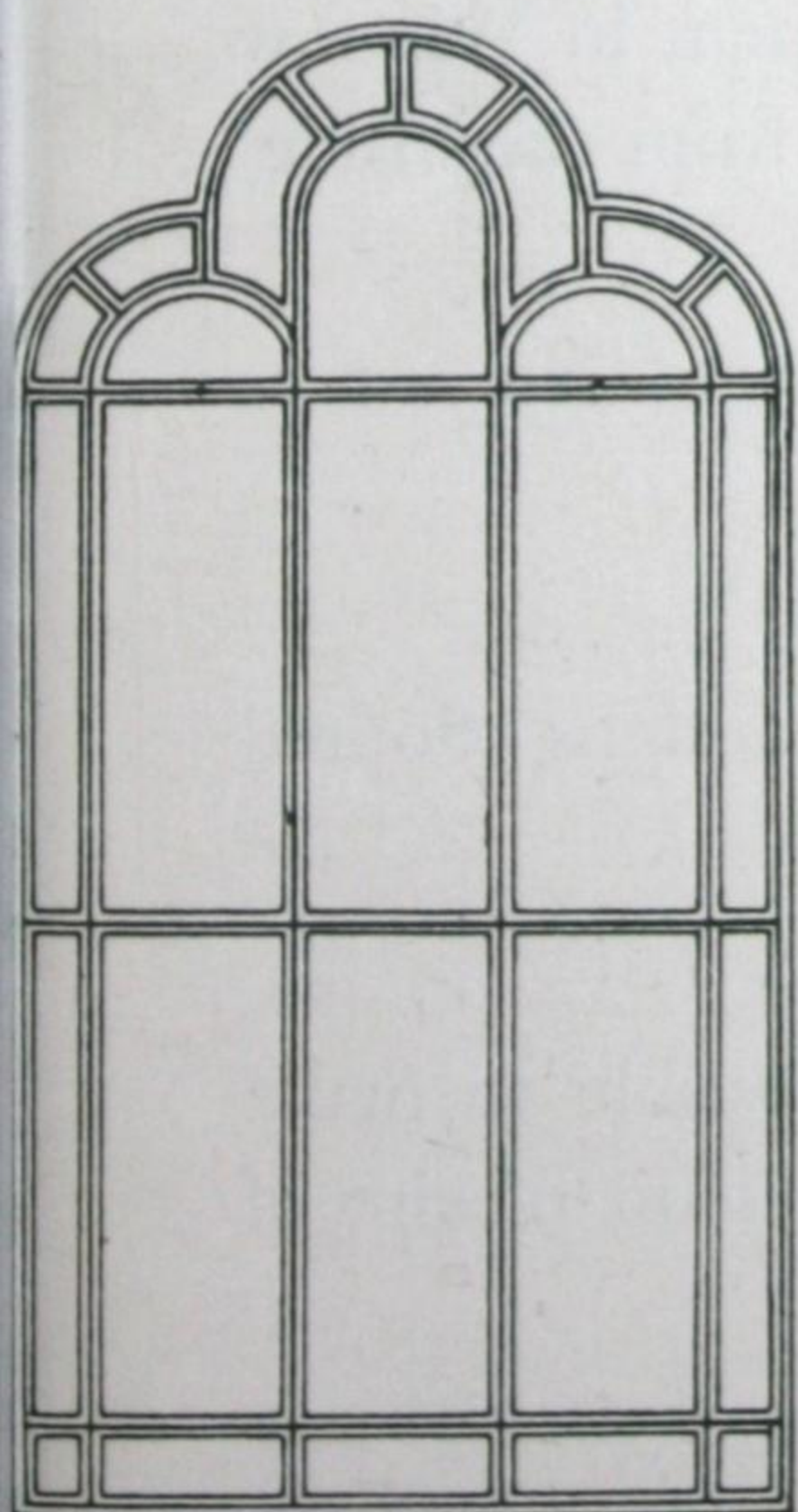
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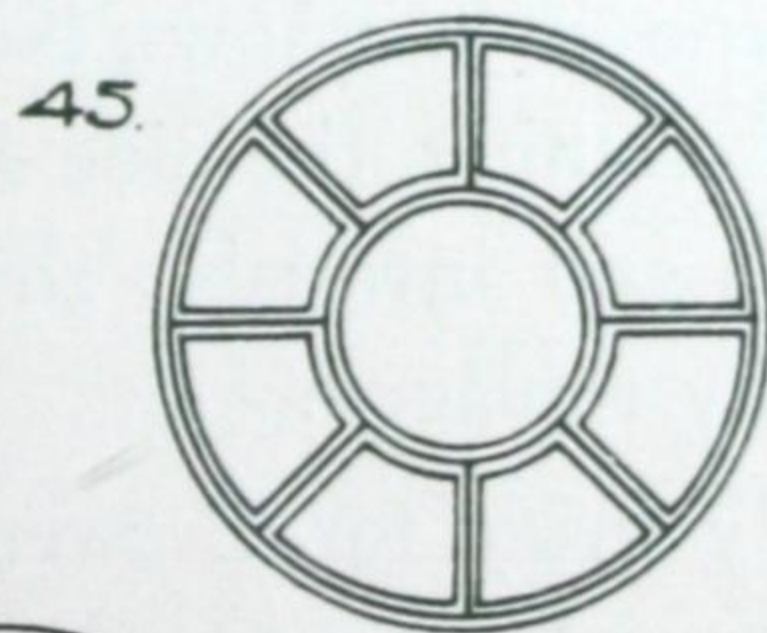
43.
ONE INCH SCALE



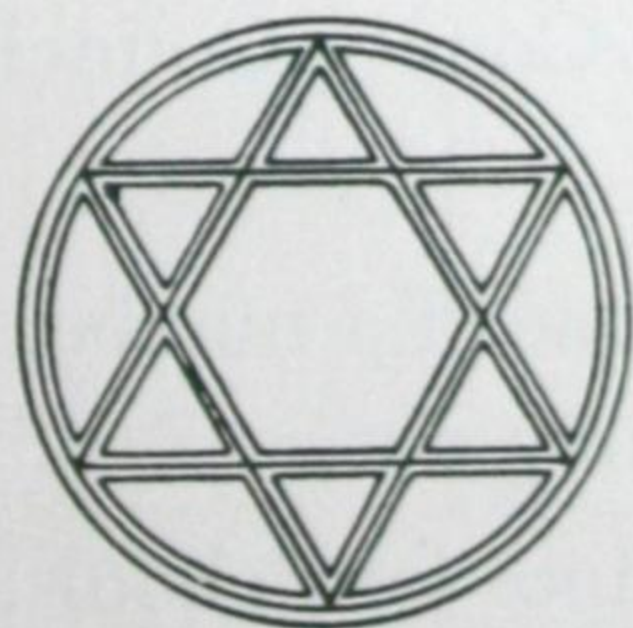
44



48
HALF INCH SCALE.



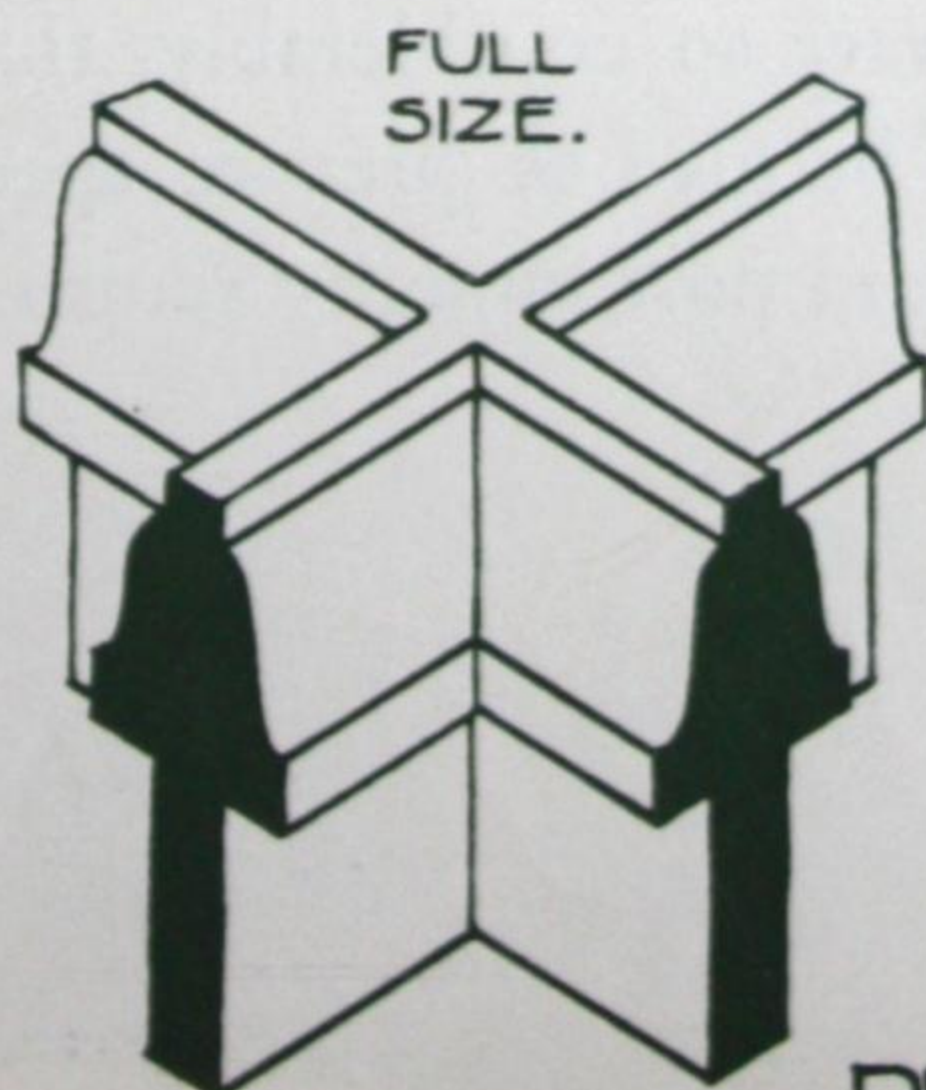
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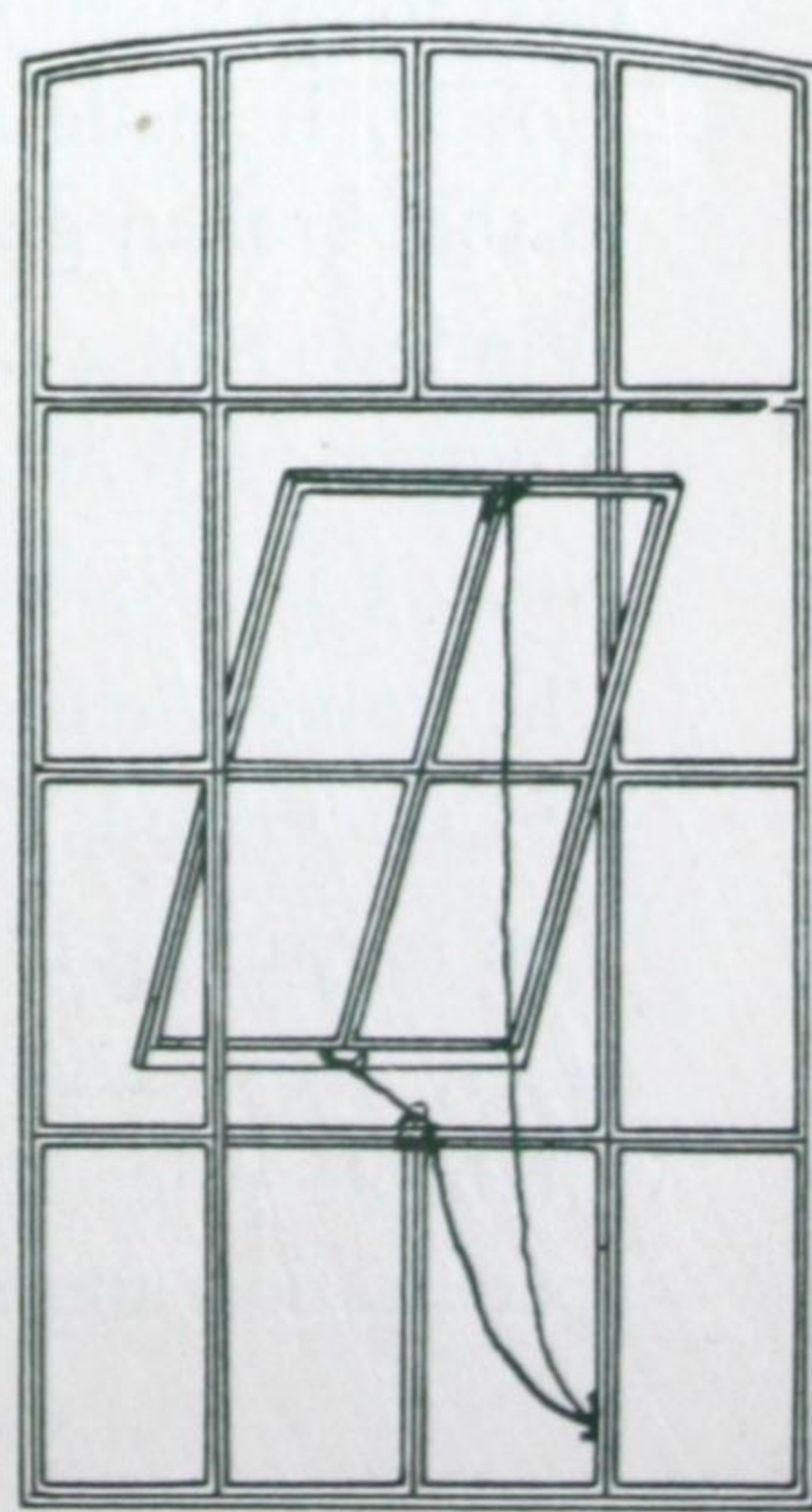
46.



47.



FULL
SIZE.



49.

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WARDRY METAL WORKS & THE CRAFTS (STAINED GLASS AND LEADED LIGHTS), SALFORD, MANCHESTER.

Wrought Steel Sashes are now used almost exclusively in place of Cast. They are invariably cheaper. They take up less daylight. They can be better adapted to varying sizes and shapes. They are practically unbreakable. The opening Casements can be better fitted and made weather-tight. The appearance is much more satisfactory than in Cast Iron.

ALL JOINTS ARE MACHINED AND ARE INTERLACED.

The sections illustrated are those we mostly use and recommend. In many cases we hold our own rolls, thereby assuring highly finished material & quick delivery. OUR WORKS ARE CAPABLE OF TURNING OUT FROM 10,000 TO 15,000 FEET OF SASHES PER WEEK.

For Side, Top and Bottom Hung Casements, we now have specially rolled Sections of extra depth and length of flanges, dispensing with the loose strips or facing pieces hitherto used for forming these flanges. See Section Nos. 113 and 114. This principle applies to the 2in. (No. 101 &c.), 1 $\frac{5}{8}$ in. (No. 110 &c.) and 1 $\frac{1}{2}$ in. (No. 115 &c.), which are the Sections in most frequent request and is applicable to Casements opening in or out.

THE WHOLE OF THESE SASH BARS ARE ENGLISH ROLLED.

The illustrations show varying types of Windows, Nos. 40 & 49 being generally used for Workshops, to facilitate cleaning, the Side Hung Casement in Window No. 40 is made to open inwards and invariably the glazing is from the inside, so that broken glass can be readily replaced.

Window No. 41 we have largely made for Breweries and that to No. 42 as Emergency Windows for London and other County Councils.

No. 43 is a Stable Window galvanised.

The Police Cell Sash, illustration No. 44, is one of a number of designs adopted by County and Town Councils which we carry out.

The remaining illustrations show varying shapes for Schools, etc.

Sizes, shapes and quantities vary so considerably, that it is impossible to make a reliable price list, we shall be glad to prepare special estimates on receipt of specification and quantities, and post same by return.

GEORGE WRAGGE, LTD.

WARDRY METAL WORKS & THE CRAFTS (STAINED
GLASS AND LEADED LIGHTS), SALFORD, MANCHESTER.

We make at the WARDRY WORKS

Metal Work, wrought and cast, for
Ecclesiastical and Domestic

Decoration, such as

Gas and Electric Light Fittings.

Gates, Railings, Vanes, Crestings,

Staircases, Lift Enclosures, Grates,

Fire Irons, Hoods, &c.

Altar Rails, Fonts, Lecterns,

Crosses, Vases, Communion Plates.

Memorial Tablets.

Engraving, Repoussé, Enamels.

Finger and Lock Plates.

Door Furniture, &c.

LEAD-WORK, WROUGHT & CAST IN SPOUT HEADS, GUTTERS,
DOWNPIPES, FOUNTAINS, TERMINALS, FIGURE, &c.

BRONZE CASTINGS, VARIOUS, INCLUDING FIGURE.

And at THE CRAFTS

Stained and Leaded Glazing.

Heraldic Painting.

Gesso, Modelled Fibrous Plaster.

Glass Mosaics.

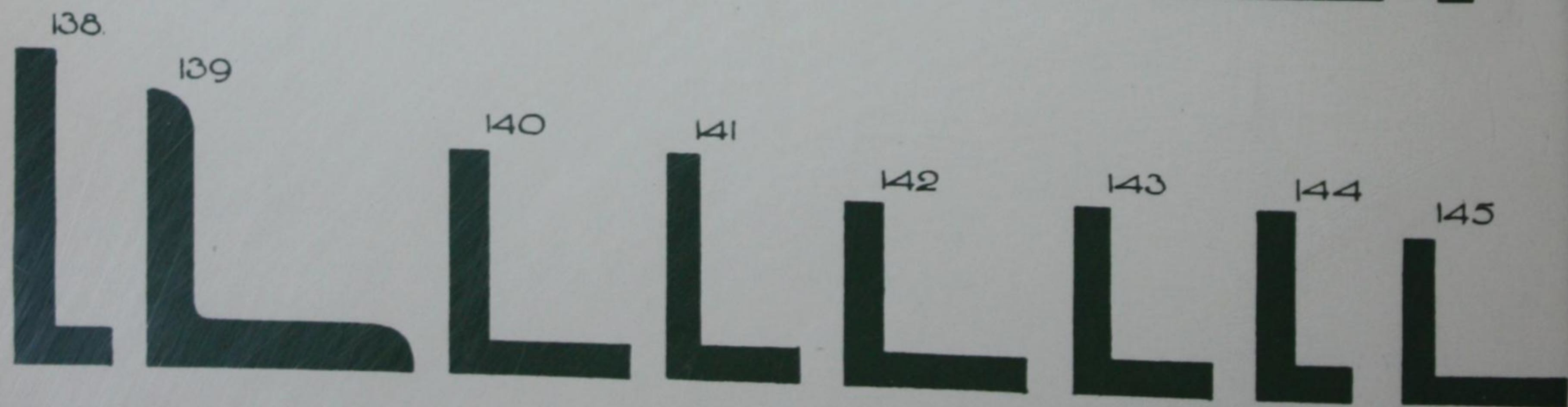
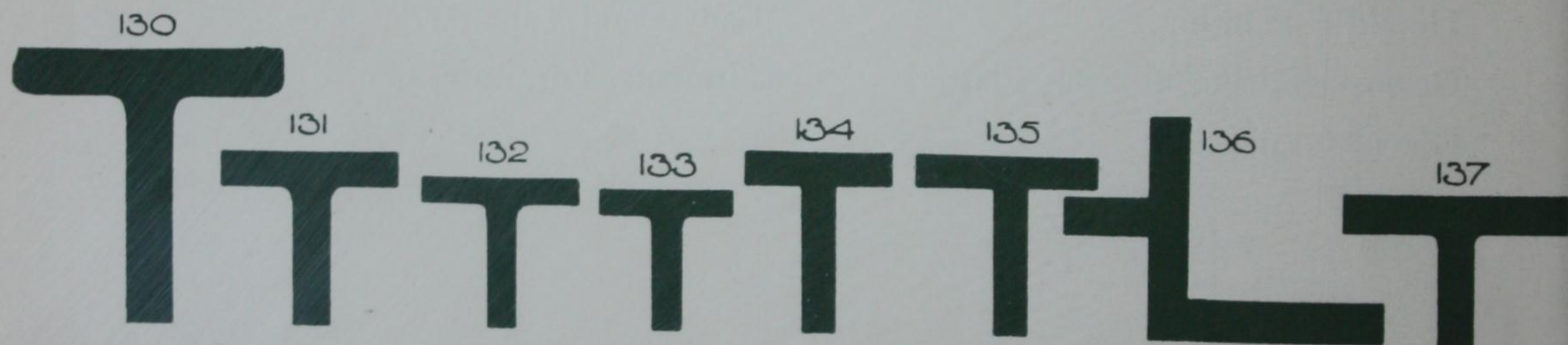
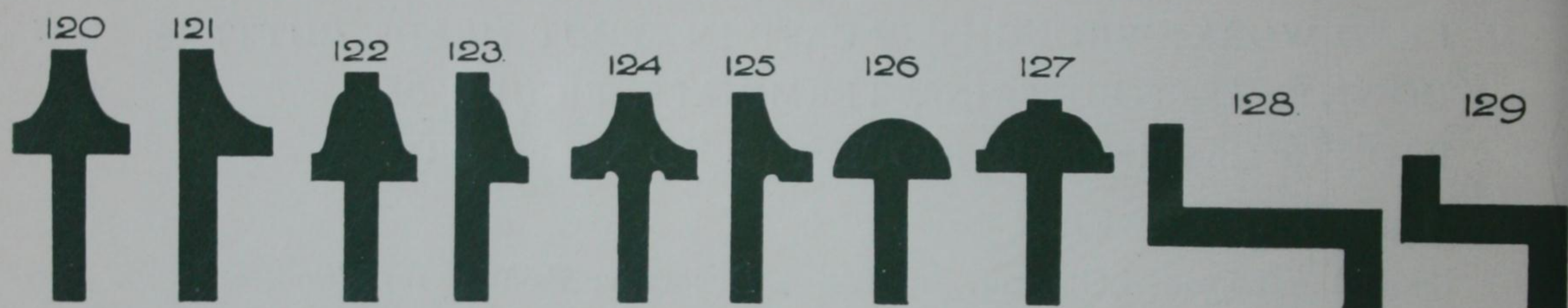
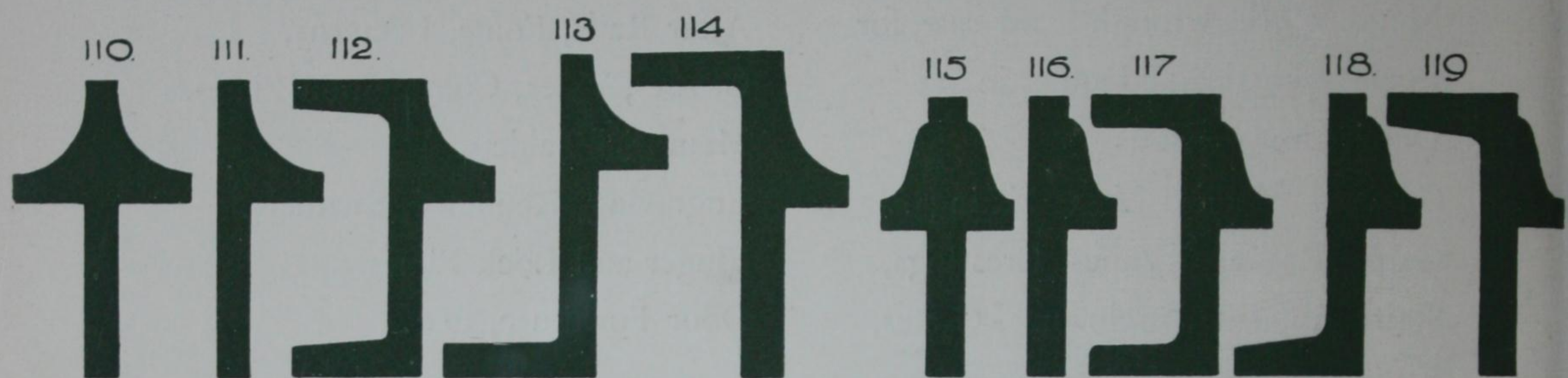
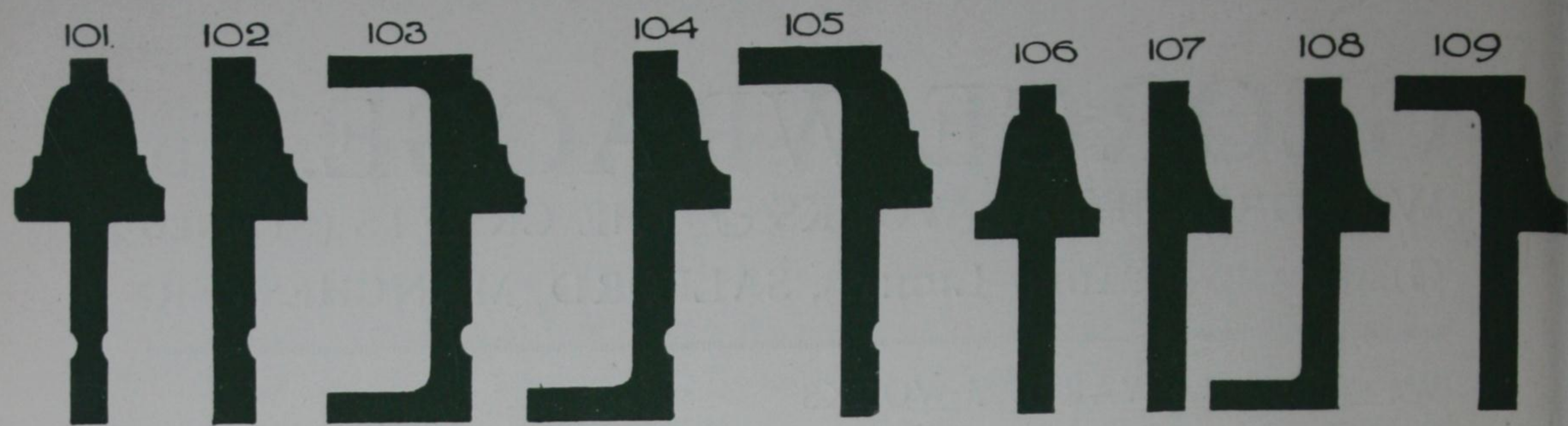
Decorative Painting on Wood,

Canvas and Tapestry.

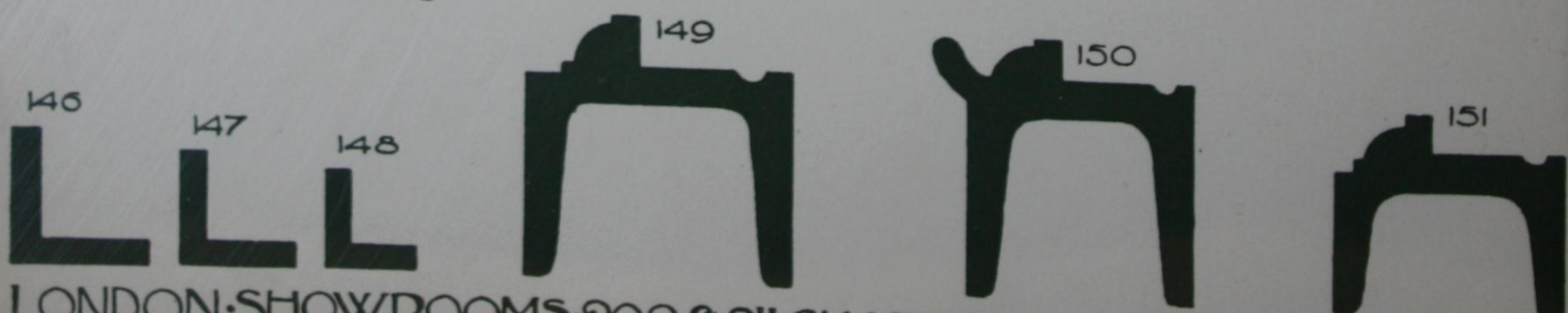
Fitments, Furniture, &c.

GEORGE WRAGGE LTD

WARDRY·WORKS·AND·THE·CRAFTS·MANCHESTER
TELEGRAMS·"CASEMENTS"·MANCHESTER·PHONE·2206



FULL·SIZE·SECTIONS



LONDON·SHOWROOMS·209·&·211·SHAFTESBURY·AVENUE·W.C
PHONE·1233·CENTRAL

HAMMERED · IRON GATES ·

SOME THAT WE HAVE RECENTLY MADE & FIXED.

Fixed at
The Rookery,
Cheshire, for
Baron Schroder.



Messrs.
E. Salomons &
A. Steintal,
Architects,
Manchester.

GEORGE WRAGGE, LTD.
WARDRY WORKS & THE CRAFTS,
SALFORD, MANCHESTER.

LONDON SHOWROOM: 211, SHAFTESBURY AVENUE, W.C.

Telegrams:
"Casements, Manchester."

Telephones: Manchester, 2206.
London, 1233, Central.

AT THE WARDRY WORKS

We make

Gas & Electric Light Fittings.

Gates. Railings. Vanes.

Grates and Fire Irons.

Lecterns. Altar Rails.

Crosses. Communion Plate.

Memorial Tablets.

Repoussé Work.

Bronze Casting.

Enamels.

Lead Work in Water Heads, Gutters,
Fountains, Cisterns, &c.

Metal Casements, Sashes and
Window Gearing.

AT THE CRAFTS

We make

Stained & Leaded Glazing.

Glass and other Mosaics.

Decorative Painting.

Gesso.

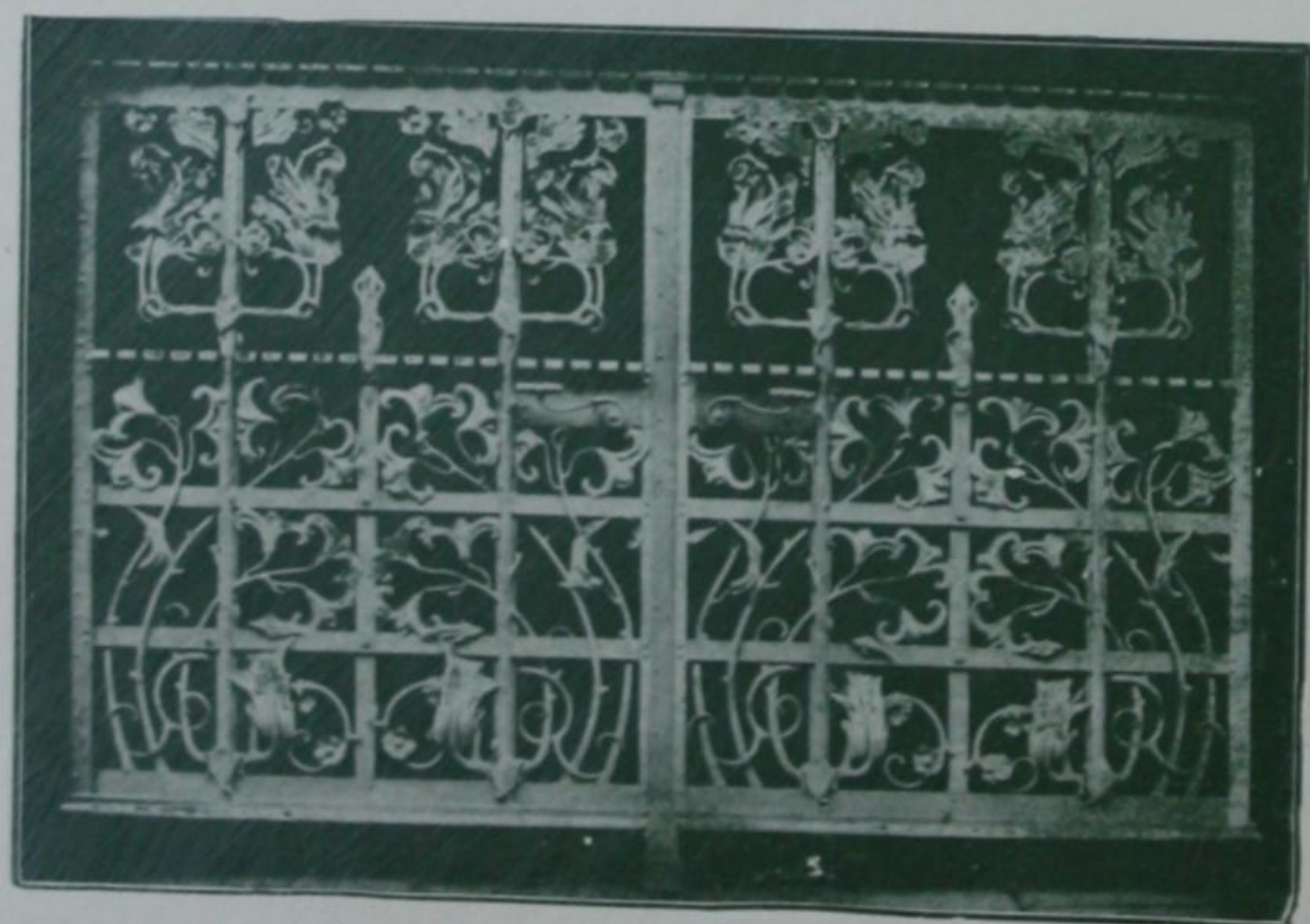
Plaster.

Furniture.



Fixed at
Parr's Bank, Spring Gardens,
Manchester.
Messrs.
Charles Heathcote & Sons,
Architects, Manchester.

GEORGE WRAGGE, Ltd., Wardry Art Metal Works, MANCHESTER.

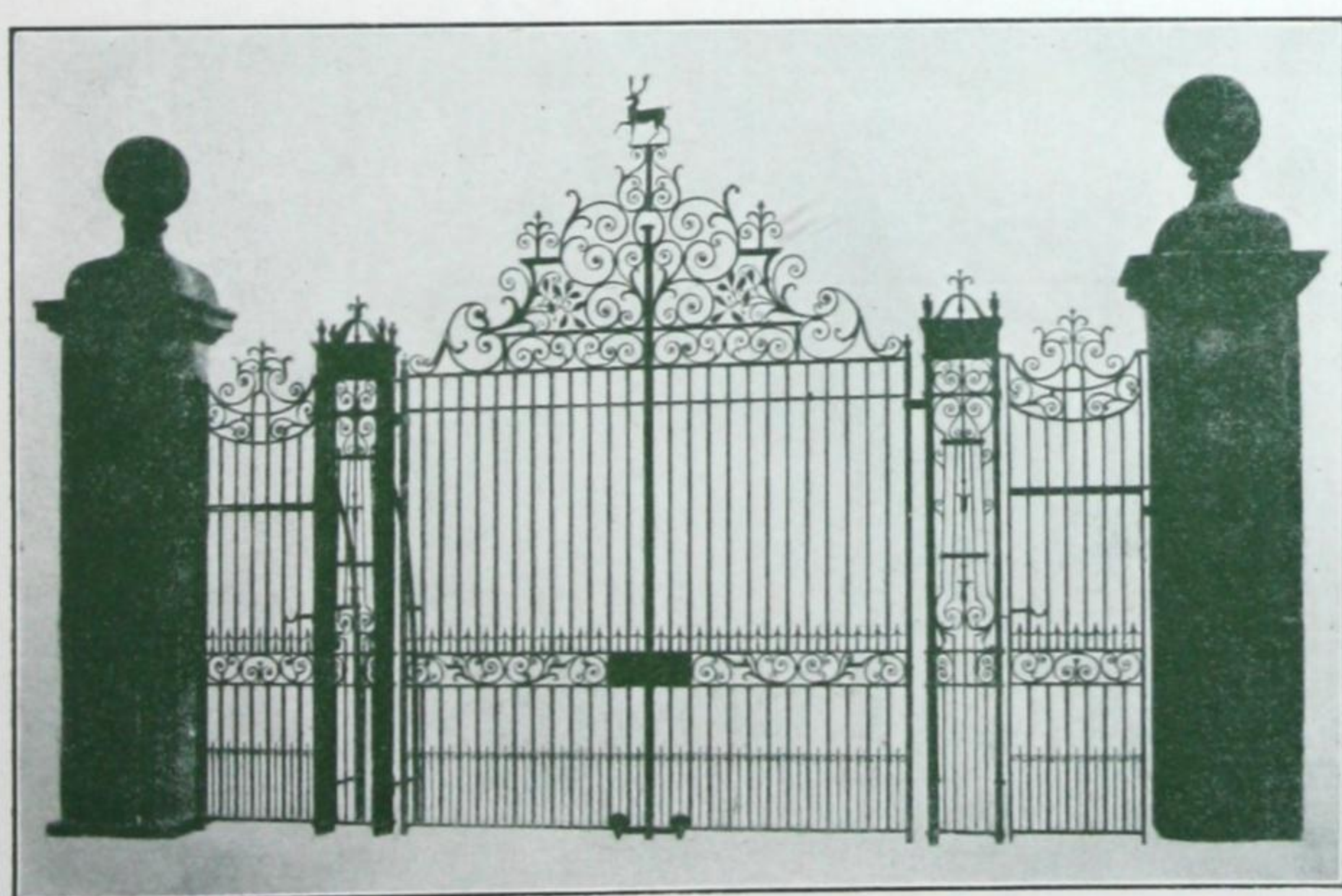


Fixed for
F. W. Thomson, Esq.,
Halifax.
Mr. Edgar Wood,
Architect, Manchester.



Fixed at Sandon Hall, Staffordshire, for the Right Hon. The Earl of Harrowby.
Mr. E. Guy Dawber, Architect, London.

GEORGE WRAGGE, Ltd., Wardry Art Metal Works, MANCHESTER.



Fixed at
Shipton Court, Oxon.,
for W. F. Pepper, Esq.
Messrs. Perkin & Bulmer,
Architects, Leeds.



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Buildings, Manchester.
Messrs.
Charles Heathcote & Sons,
Architects, Manchester.

GEORGE WRAGGE, Ltd., Wardry Art Metal Works, MANCHESTER.



Fixed at the Head Offices
of The Mercantile Bank,
Manchester.
The late
Mr. Gibbons Sankey,
Architect.

All previous Lists are hereby cancelled.

Wardry Metal Works, Salford,
Manchester, May, 1898.



DEAR SIR,

In presenting this Catalogue to the Architectural Profession I have endeavoured, with Mr. Edgar Wood's assistance (which I gratefully acknowledge) to provide for the increasing enquiries for ARTISTIC and INTERESTING Metal Work in all its varieties, and I hope by the way in which this has been done that this Catalogue may have a value beyond that of the ordinary commercial type.

In addition, I have tried to make the work as comprehensive and as easy of reference as possible; a complete index will be found on page 6, while the title page preceding each Department gives some details of its particular section.

That portion of the Catalogue relating to metal casements is carefully priced and detailed; it was, however, thought undesirable to price the metal work portion of the book, but in this case merely to illustrate suggestions and give an idea of the feeling I am anxious to introduce into this most interesting Department.

It will be noticed that in the casement section, and indeed throughout the book, the drawings shew the "application" of the various articles; this, in addition to lending interest to the various pages, will doubtless be helpful to the architect and client in making their selection.

I take this opportunity of inviting you to visit my workshops to see the work in progress, and to form your own judgment as to the capabilities of my establishment.

Yours faithfully,

George Wardry

Registered No. 3932

To Messrs. Scott Morton & Co.

Edinburgh.

With Compliments.

INDEX.

Attention is drawn to the Index (page 6), where easy reference can be made to the various articles illustrated.

TERMS.

All goods to be packed and delivered free on rails Manchester. Payments to be made at the rate of 80 per cent. of the total value on delivery, and the balance in one month, or subject to special arrangement. All cases to be returned in good condition, carriage paid, within 14 days from receipt of goods.

ORDERING.

When ordering Metal Casements, the section should be stated, and the Nos. of the designs of the fittings (see pages 37 to 47), if differing from those specified. The sizes should be given nett "daylight," and full size details of the jambs, head and cill sent, shewing which is outside. The "hands" also should be given if Side Hung Casements, and notification should be made as to whether clear glass or leaded glazing is to be used. An order sheet, shewing example, will be posted on application. Measurements will be taken by a member of our staff free of charge where the order is of sufficient magnitude to cover his expenses.

GENERAL REMARKS.

Each section of Casement is drawn full size, as well as the details of the rebates which are recommended. The Casements can be fitted to grooved or other details. Those sections having GROOVED outer frames are specially designed to overcome difficulties in this respect. A description is given on each page of illustrations.

Casements for highest class work are illustrated on pages 9 to 19, and those of simpler form on pages 21 to 31.

A comparative price list is given on pages 32 and 33.

Each form of Casement is illustrated on page 49.

Each section is rolled in BRONZE, and special estimates will be given on receipt of specification and quantities.

All fittings are interchangeable, and are made on the premises.

The fixing of Casements requires careful attention; a separate staff is retained for this purpose, and clients will be well advised to ask for an estimate for this portion of the work.

The GLAZING, too, is important. Glaziers' putty should on no account be used, but an oil mastic cement (separate list for mastic cement will be posted).

An estimate will be given for the glazing in clear glass or leaded work.

SASHES, see pages 51, 52, 53, 54, and 55.

The matter on pages 4 and 5 speaks for itself.

GEARING is specially dealt with on page 50.

METAL WORK. This is a big department. Particular attention is drawn to the illustrations (see pages 57 and onwards).

LEADED LIGHTS, see page 93. A separate Catalogue will be posted free on application.

The following is an abbreviated LIST OF BUILDINGS where our Casements & Sashes have recently been or are now being supplied.

CASEMENTS & FRAMES.

NEW TECHNICAL SCHOOLS, MANCHESTER.
(Some hundreds of our best sections.)

ROYAL ASYLUM, CHEADLE.

CHRISTIE LIBRARY, OWENS COLLEGE.

GOVERNMENT BUILDINGS, DUBLIN.

ROYAL INFIRMARY, BRISTOL.

ROSS HOSPITAL, HEREFORDSHIRE.

NEW MEDICAL SCHOOL, MIDDLESEX
HOSPITAL.

BROOK HOSPITAL, LONDON.

SOUTH WESTERN do.

SOUTH EASTERN do.

(Several thousand Casements in all of our No. 19 section, page 9.)

EAST LANCASHIRE INFIRMARY,
BLACKBURN.

THE NEW TRAMWAY OFFICES, DUBLIN.

COTTAGE HOMES, STYAL.

NEW GRAND ARCADES, LEEDS.

NEW SANATORIUM, ASTLEY, LANCASHIRE.

MONASTERY, ERDINGTON, BIRMINGHAM.

NATIONAL PROVINCIAL BANK, LEEDS.

PARR'S BANK—BRANCHES, viz :—
ST. MARTIN'S LANE; HIGHGATE; EARL'S
COURT ROAD.

HOTEL METROPOLÉ, BLACKPOOL.

SCHOOLS AT WEST TWERTON, NELSON,
BLACKPOOL, BATH, &c., &c., AND AT
NUMEROUS CHURCHES.

RESIDENCE AT LOCUST AVENUE, PHILA-
DELPHIA.

(Upwards of 230 of our No. 20 section BRONZE
Casements, page 11, are now being supplied to this
mansion.)

BLACKHEATH PARK, LONDON.

SIR ARTHUR SASSOON'S HOUSE, PARK LANE.

HARPENDEN, SURREY; CHURCH STRETTON;

LINGFIELD, SURREY; ACOMB HALL, YORK.

CLAVERTON HALL, BATH.

BRIDGEWATER HOUSE, LONDON.

WARDLEY HALL, WORSLEY.

JOHNBY HALL, CUMBERLAND.

FARMINGWOODS HALL, NORTHAMPTON.

AND AT EASTBOURNE, ISLE OF WIGHT,
EDINBURGH, YORK, &c.

OFFICES OF THE LINOTYPE WORKS.

(A large number of our No. 20 section BRONZE
Casements, page 11, have been fixed at these
Offices).

STEEL SASHES.

MESSRS. VERNON'S FLOUR MILLS,
BIRKENHEAD.

(Over 20,000 superficial ft. of our 2in. regd. bar, No. 30,
page 53, and 350 casements have been supplied to
these buildings.)

THE GENERAL ELECTRIC CO.'S WORKS,
MANCHESTER.

(Over 10,000ft. 2in. section, and 200 casements.)

MESSRS. WORRALL'S DYE WORKS.

(Over 12,000ft. 2in. section, and 300 casements.)

MESSRS. MAGEE, MARSHALL & CO'S
BREWERIES AND BONDED STORES,
BOLTON.

(Over 10,000ft. 1½in. section No. 16, page 53.)

NEW TELEGRAPH FACTORY, BOVAY PLACE,
LONDON, FOR H.M. OFFICE OF WORKS.

POST OFFICE, CARDIFF, FOR H.M. OFFICE
OF WORKS.

POST OFFICE, WEST HARTLEPOOL, do.

INK WORKS, HORNSEY.

WHITE WEBB'S PUMPING STATION,
ENFIELD (NEW RIVER CO.)

NEW WAREHOUSE, MANCHESTER, FOR
MESSRS. JOHNSON, CLAPHAM & MORRIS.

SCHOOLS, APPLETON, BOLTON, STOCKTON,
ABERDEEN, &c., &c.

NEW RIVER CO'S. ENGINE HOUSE,
CLERKENWELL.

MESSRS. FRY'S NEW FACTORY,
LONDON, E.C.

MESSRS. GOODALLS & SONS' FACTORY,
LONDON, N.W.; AND MANY OTHERS.

METAL WORK.

NATIONAL PROVINCIAL BANK, LEEDS.

(In Aluminium throughout.)

MERCANTILE BANK OF LANCASHIRE
(HEAD OFFICES).

BANK OF LIVERPOOL (HEAD OFFICES).

MANCHESTER & COUNTY BANK, SOUTH-
PORT. (Also the Casements.)

CAPITAL & COUNTIES BANK, BATH.

MANSION, ST. HELENS, DUBLIN.

BATH CORPORATION.

(Over 60 Bronze Tablets to designs by their architects,
Messrs. Silcock & Reay.)

HOTEL METROPOLÉ, BLACKPOOL.

THE TOWER, NEW BRIGHTON.

SCHOOL BOARD OFFICES (HEADQUARTERS),
LIVERPOOL.

COBORN GIRLS' SCHOOL, BOW ROAD,
LONDON.

VARIOUS CHURCHES, &c., &c.

COPIES OF TESTIMONIALS.

1, VICTORIA STREET, WESTMINSTER, S.W., |

10A, GEORGE STREET, EDINBURGH, April 13th, 1896.

BLIZZARD IN AMERICA.

COPY OF TESTIMONIAL. (Unsolicited).

FRANK MILES DAY AND BROTHER
ARCHITECTS
225 CHESTNUT STREET, PHILADA.
F. M. DAY H. KENT DAY

March 1, 1899.

Mr. George Wragge,
Salford,
Manchester, England.

Dear Sir,

Noting your full page advertisement in the "Specification" this morning reminds us that we have been intending for some time to write to you to tell you how admirably your casements in Mr. Newbold's house behaved during the recent blizzard. The storm was one of unprecedented severity, the snow being thirty inches on a level and it was accompanied by winds of great velocity. The snow being very fine and dry, found its way in generally through the slightest cranny. The blizzard was promptly followed by a rapid thaw that set everything afloat and caused quite serious damage through leaks. The conditions were probably the most trying that we remember during the course of our practice. Your casement frames perfectly resisted every force of that storm and the subsequent thaw. No snow whatever entered Mr. Newbold's house either through the doors or windows, nor did any water get in when the thaw came.

This, we think, shows not only the excellence of the goods of your manufacture but the fact that they were well installed by the men under our direction. We are glad to be able to write you this, not only on our own account, but because the Owner of the house particularly wished us to express to you his satisfaction with your work.

Yours very truly,

Frank Miles Day & Bro.

Also, "THE CRAFTS" 152, 154,
Chapel Street, Salford.

STAINED GLASS, LEADED GLAZING,
MOSAICS, GESSO, REPOUSSÉ.

The above *UNSOLICITED* Testimonial refers to a very important order for upwards of 250 BRONZE CASEMENTS supplied to Mr. Newbold's Mansion, Philada. U.S.A. The sections used were Nos. 20, 22 and 24, illustrated in our NEW CATALOGUE, pages Nos. 10, 14 and 18 respectively.

GEORGE WRAGGE,

WARDRY METAL WORKS AND THE CRAFTS, 152, 154, & 156,
CHAPEL STREET, SALFORD, MANCHESTER.

Branches at LONDON, 22, Surrey Street, Strand, W.C.
DUBLIN, 36, Georges Quay.
BELFAST, 124, Donegal Street.

Telegrams:
"Casements, Manchester."
Telephone No. 2206.

The following is an abbreviated LIST OF BUILDINGS where our

COPIES OF TESTIMONIALS.

1, VICTORIA STREET, WESTMINSTER, S.W.,
January 22nd, 1897.

Dear Sir,—The wrought iron casements which you have supplied to the Brook Fever Hospital, Shooters Hill, and several other large public buildings of which I am the architect, are excellent in quality and very reasonable in price. They have given me great satisfaction.

Yours truly (signed), THOS. W. ALDWINCKLE.

6, ABBEY SQUARE, CHESTER, March 26th, 1898.

Dear Sir,—It is a matter of regret to me that I have not used your casements in a recent work, especially as those you supplied to Wardley Hall, Worsley, for the Bridgewater Trustees, were so satisfactory, not only in appearance but for being weather-tight. I hope in the course of the summer to give you an order.

I remain, yours faithfully,

(Signed), JOHN DOUGLAS (of DOUGLAS & MINSHULL.)

95, CANNON STREET, LONDON, E.C., April 2nd, 1898.

Mr. George Wragge has recently carried out some wrought iron railings and gates for me in a satisfactory manner. I am placing more work in his hands.

(Signed), GEORGE ELKINGTON.

32, KING ST. WEST, MANCHESTER, March 29th, 1898.

Dear Sir,—I have much pleasure in informing you that the metal casements which you have supplied for several years for various buildings carried out under my superintendence have been perfectly satisfactory to me, and have met with the entire approval of my clients. I may add that some of these have been fixed with every success in very exposed and trying positions. Yours truly (signed), JOHN ELY.

6, MILLSTONE LANE, LEICESTER, March 26th, 1898.

Dear Sir,—The wrought-iron casements you fixed at the Technical and Art Schools here are satisfactory to us.

Yours faithfully (signed), EVERARD & PICK.

16, HIGH STREET, CARDIFF, May 9th, 1897.

Dear Sir,—I am pleased to say that the whole of your work at the Bute Offices has been carried out and finished complete to my entire satisfaction.

Yours faithfully (signed), WILLIAM FRAME.

31, JAMES STREET, LIVERPOOL, March 28th, 1898.

We have pleasure in stating that Mr. George Wragge has supplied the metal casements for several houses for us, and that they have been most satisfactory.

(Signed), GRAYSON & OULD.

26, CASTLE STREET, SHREWSBURY, March 7th, 1898.

Dear Sir,—In answer to your of the 23rd Feb., re casements, church strecton, your casements are a perfect success and give every satisfaction, and shall certainly order from you when I have any more work requiring iron casements.

Yours faithfully (signed), S. GINGELL JONES.

7, DOUGHTY ST., MECKLENBURG SQ., W.C.,
March 28th, 1898.

Dear Sir,—I have great pleasure in saying that the ornamental wrought iron gateway and the wrought steel sashes which you have at various times executed for works under my superintendence, have always given me great satisfaction. The gateway at St. Peter's Church has been greatly admired.

Yours faithfully, (signed), JOHN LADDS.

SUN BUILDINGS, GLASGOW, May 28th, 1896.

The fittings are first-rate, and I am well pleased with them.

(Signed), WM. LEIPER.

EXCHANGE BUILDINGS, BRADFORD, Dec. 17th, 1895.

The casements are very satisfactory.

(Signed), MAWSON & HUDSON.

THE COURTS, CARLISLE, April 5th, 1898.

Dear Sir,—I have used your casements now for several years and I am glad to say that I have never yet had any cause for complaint. I have found them of good workmanship and appearance, and perfectly efficacious in turning the weather, in which respect they have been well tried in this district. I have specified them again recently in some restorations of old work.

Yours faithfully,

(Signed), GEO. DALE OLIVER.

10A, GEORGE STREET, EDINBURGH, April 13th, 1896.

Dear Sir,—. . . Allow me at the same time to express my entire satisfaction with the sashes. They are a very satisfactory job in wrought iron work.

(Signed), R. HAMILTON PATERSON.

CENTRAL BANK CHAMBERS, TORONTO ST., LEEDS,

January 22nd, 1897.

We have pleasure in stating that we consider the metal casements and wrought metal work executed by Mr. George Wragge to be of most excellent quality and workmanship.

(Signed), PERKIN & BULMER.

61, ROYAL AVENUE, BELFAST, February 1st, 1898.

We have found your second quality casements to be most satisfactory in several works we used them in lately.

(Signed), JAS. S. & J. PHILLIPS.

1, ST. MARNOCK PLACE, KILMARNOCK, Feb. 16th, 1897.

KILMARNOCK INFIRMARY.

Dear Sir,—I duly received yours of the 23rd December last, and an answer would have been sent sooner, but that it was thought best to see how the winter weather might affect the windows. I am glad to say that in all weathers the windows have given great satisfaction. (Signed), WM. RAILTON.

WESTMINSTER, S.W., March 31st, 1898.

The iron casements and other wrought iron work you have supplied, give us great satisfaction.

(Signed), ROLFE & MATTHEWS.

9, ADAM STREET, ADELPHI, LONDON, W.C.,

March 31st, 1898.

Dear Sir,—I have pleasure in saying that the work you have executed from my designs has been quite satisfactory. The porch at Notting Hill and the gates at Kentford are all that can be desired in wrought ironwork, the spirit of the style is well preserved in the scrolls and leaves, and the workmanship is very good indeed.

Yours faithfully (signed), F. W. ROPER.

OCTAGON CHAMBERS, MILSOM STREET, BATH.

We have used Mr. George Wragge's casements for some years and have always found them to be extremely effective in weather-proof qualities and of excellent workmanship throughout. The fittings of these casements, made in a number of pleasing designs, leave little to be desired in the way of finish and effectiveness. We are glad to recognize in all Mr. Wragge's decorative metal work, a high standard of quality and artistic craftsmanship; and designers may always rely upon him to faithfully maintain the distinctive character of their work.

(Signed), SILCOCK & REAY.

61, ALBION STREET, LEEDS, March 26th, 1898.

Dear Sir,—It gives me pleasure to state that you have provided me with ornamental metal work for buildings of which I have been the architect, and that the work has in all cases been executed to my satisfaction. At the Leeds School of Medicine you supplied the entrance gates and staircase and gallery balustrades, and more recently you have provided an ornamental iron balustrade for the warehouse of Messrs. Hotham & Whiting, Wellington Street, Leeds. The interior casement windows of the Operating Department of the Bristol Royal Infirmary which is being remodelled from my designs are being supplied by your firm. In all orders entrusted to your charge, I have found the work artistic in spirit and excellent in execution.

I am, yours faithfully,

(Signed), WILLIAM H. THORP, F.R.I.B.A.

19, QUEEN ANNE'S GATE, LONDON, S.W.,

January 14th, 1897.

Dear Sir,—I have on several occasions used your casements, and have found them very satisfactory.

(Signed), ASTON WEBB.

STAFFORD, December 2nd, 1897.

I hope this is not the last transaction we may have together. I am thoroughly satisfied with your casements.

Yours truly (signed), GEORGE WORMAL.

INDEX.

A	PAGE.
ART METAL WORK.....	from 57
ALTAR RAILS.....	79

B	
BALUSTRADES AND BALUSTERS	63
BRASSES (MEMORIAL &c.)	89

C	
CASEMENTS, Side Hung, to open out... 9, 11, 19	21, 23, 31
Do. do. to open in	13, 25
Do. do. in pairs.....	19
Do., Centre Hung, opening in and out }	49
Do. do. ordinary type ... }	
Do., Top Hung, to push out 9, 11, 21, 23, 31	
Do. Bottom Hung, to fall back ...	27
Do. HOPPER	49
Do. SLIDING	49
Do. POLICE CELL	49
Do. STABLE.....	49
Do. LOUVRE	49
Do. FITTINGS	35
(Handles, Stays, Plates, &c.)	
CABINET FITTINGS	71, 75
CHANCEL SCREENS	79
COMMUNION RAILS	79
Do. PLATE	81
CANDLESTICKS.....	81
CONTRACTS (LIST OF)	4

D	
DOOR FURNITURE	69, 71, 73, 75
DOG GRATES	67
DISHES (REPOUSSÉ)	81
DESKS (READING)	79
DOOR KNOCKERS	69
DOOR HANDLES	69, 71, 75

E	
ENGRAVED PLATES AND BRASSES ...	89
ELECTRIC LIGHT FITTINGS.....	85
ENTRANCE GATES..	59, 61

F	
FENDERS, KERBS & FIRE IRONS	67
FURNITURE (DOOR)	69, 71, 73, 75
FINGERPLATES.....	69, 71, 73, 75
FINALS	65
FONT COVERS	79

G	
GATES	59, 61
GAS FITTINGS	83
GRYLLES	61
GRATES	67
GENERAL REMARKS	3

H	
HANGING SIGNS	77
HANDLES (DOOR).....	69, 71, 73, 75
Do. (CASEMENTS)	37, 39, 41
HINGES	69, 71, 73, 75
HOSPITAL WINDOWS	49
HOODS (FOR GRATES)	67
HANDRAILS.....	63

I	
INDEX	6
INTRODUCTORY REMARKS	2
IRONS (FIRE)	67

J	
JUGS	81

K	PAGE.
KERBS	67
KNOCKERS (DOOR)	69

L	
LAMPS (OIL)	87
LECTERNS	79
LEADED LIGHTS.....	91
LETTER PLATES	69
LOCK PLATES	69, 71
LIST OF CONTRACTS	4

M	
MEMORIAL TABLETS	89
METAL WORK	from 57

N	
NAME PLATES	89
NEWELS	63

O	
OLD HANDLES AND PLATES	41
OIL FITTINGS	87
ORDERING (INSTRUCTIONS FOR)	3

P	
PLACQUES	81
PLATES (REPOUSSÉ)	81
PLATES (CASEMENT)	39, 41, 43, 45
PANELLING.....	63
PEWTER WARE	81
PARK GATES.....	59, 61
PILLAR SIGNS	77

Q	
R	
REPOUSSÉ WORK	81
READING DESKS	79
RAILINGS	63

S	
SIGNS (HANGING AND OTHERS)	77
SHAM BANDS	69, 71, 73, 75
SASHES (WINDOW).....	55
Do. (SECTIONS)	53
STABLE WINDOWS.....	49
SCREENS (CHANCEL)	79
STAIR RAILINGS	63
STAINED GLASS	93

T	
TERMINALS.....	65
TERMS OF PURCHASE	3
TESTIMONIALS	5

U	
V	
VANES.....	65

W	
WINDOWS (SEE CASEMENTS).	

X	
Y	
Z	

CASEMENTS & FRAMES.

PAGES.

Side Hung Casements, opening outwards	8, 10, 20, 22, 30.
Do. do. do. inwards	- 12, 24.
Do. do. do. in pairs	- - 18.
Centre Hung do. do. in and out	- - 48.
Do. do. do. ordinary type	14, 28.
Top Hung do. do. outwards	8, 10, 20, 22, 30.
Bottom Hung do. do. inwards	- 16, 26.
Hopper Casements (for Churches, Schools &c.)	- 48.
Sliding Sashes, Police Cell Windows & Stable	do. 48.

Casements for high class work, see pages 9 to 19 inclusive.

Do. of simpler sections	do. 21 to 31	do.
Comparative price list	- do. 32 & 33	
Extras - - -	- do. 34	

NOTE.—All sections are made in BRONZE, special estimates will be given.

All corners of our Casements are rivetted and brazed.

And all fittings are made on the premises.

Fittings are illustrated on	-	pages 37 to 47 inclusive.
Sashes do.	-	do. 53 to 55 do.
Gearing do.	-	do. 50
Metal Work do.	-	do. 59 to 89 do.
Leaded Lights do.	-	do. 93

GEORGE WRAGGE,

WARDRY METAL WORKS, SALFORD, MANCHESTER.

CASEMENTS & FRAMES of No. 19 SECTION, registered (see opposite page), in steel, to open outwards. Guaranteed weather-tight. SPECIFICATIONS to which the price lists below are subject.

SIDE HUNG CASEMENTS.

Casements to have square heads, and prepared to receive glass in one square. All corners rivetted and brazed.

No. 1 QUALITY to be fitted with handle No. 86 (see page 37), and with sliding stay No. 94 (see page 47); those casements 4ft. 6in. and up to 5ft. in height to be fitted with sliding bolt securing the light at the top and bottom, and those over 5ft. in height with sliding bolt securing the light at the top, centre, and bottom, working on coinage metal plates. Casements to be hung on hard brass pivots working on lathe-turned steel or bronze centres. All fittings to be of coinage metal, polished and lacquered, toned or bronzed.

No. 2 QUALITY to be fitted with handle No. 84 (see page 37), stay No. 92 and 2 pins (see page 47), and with bolts to casements 4ft. 6in. in height and upwards, and hung on pivots as before described. All fittings to be of coinage metal, plainly filed.

No. 3 QUALITY to be fitted with handle and stay as in No. 2 Quality, and with bolts to casements 4ft. 6in. in height and upwards, and hung on pivots as before described. All fittings to be of malleable iron, with working parts in coinage metal.

NOTE. Any other fittings illustrated in this Catalogue can be adopted in preference to the above at *pro rata* prices if desired, or special designs and prices will be submitted.

TOP HUNG CASEMENTS.

No. 1 QUALITY to be fitted with No. 92 stay (see page 47) and 2 pins in coinage metal, polished or bronzed.
 No. 2 QUALITY do. do. do. in coinage metal, plainly filed.
 No. 3 QUALITY do. do. do. in malleable iron, with coinage metal parts.
 Special quotations will be given for rod or other gearing (see page 50).

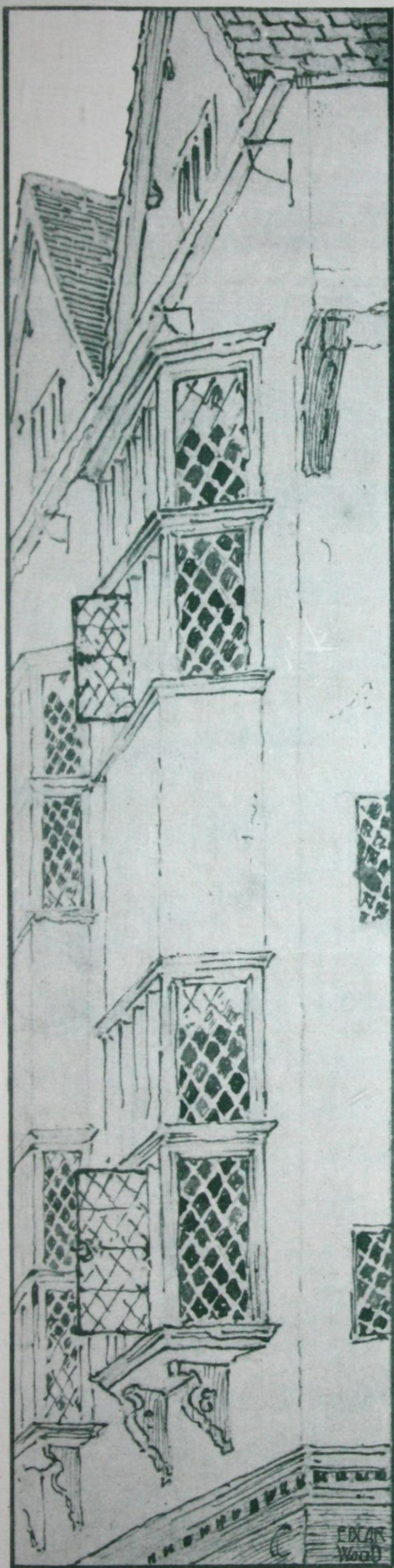
Casements & Frames, side hung, opening outwards.					Fixed Lights.		
Height.	Width.	Quality 1.	Quality 2.	Quality 3.	Same sections as the Casements.	Of a section giving same sight line & same plane of glass as the Casements.	Angle Iron.
2ft. and under -	2ft. & under	32/6	29/-	28/-	16/-	13/-	5/6
Above 2ft. & under 3ft.	" "	33/6	30/-	29/-	17/-	13/6	6/-
3ft. and under 3ft. 6in.	" "	35/-	31/6	30/6	18/-	14/-	6/6
3ft. 6in. and under 4ft.	" "	37/6	34/-	33/-	20/-	16/-	8/-
4ft. and under 4ft. 6in.	" "	38/6	35/-	34/-	21/-	17/-	9/-
4ft. 6in. and up to 5ft.	" "	55/-	50/-	47/6	23/-	18/-	10/-

NOTE. For Casements over 5ft. in height, section No. 20 (see page 11) will be used.

Casements and Frames, top hung, to push out.				
Height.	Width	Quality 1.	Quality 2.	Quality 3.
2ft. and under -	2ft. and under	25/-	24/-	23/6
Above 2ft. & under 2ft. 6in.	" "	25/6	24/6	24/-
2ft. 6in. and under 3ft. -	" "	26/-	25/-	24/6
3ft. and up to 3ft. 6in. -	" "	30/-	29/-	28/6

The prices of each section illustrated in this Catalogue are grouped together on pages 32 & 33, so that easy comparison can at once be made. For complete list of EXTRAS see page 34. For designs of FITTINGS, see pages 37 to 47.

The above section is made in BRONZE, prices on application.



GEORGE WRAGGE

Wardro metal
works Salford
Manchester

22 Surrey St
Strand
London W.C.

METAL CASEMENTS & FRAMES
in Steel iron & bronze

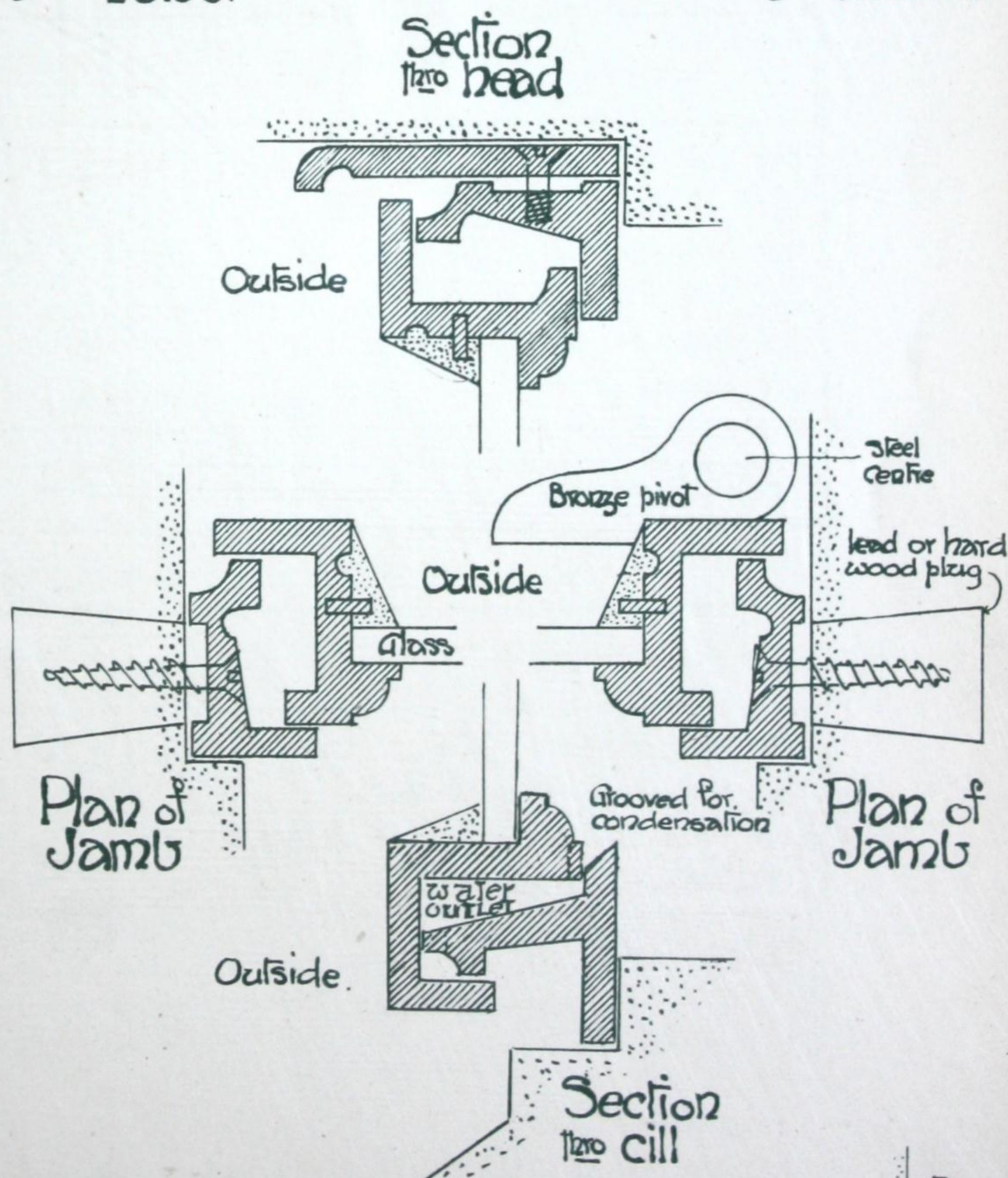
Guaranteed
weathertight

Section No 19
in steel

to open @
outwards

Reg No @
231581

Full size @
details



NOTE. The above sections are specially adapted for grooved
jamb etc., the outer frame being sunk so that a bar can be
fitted & the straight joint as in ordinary flat sections avoided



GEORGE WRAGGE,

WARDRY METAL WORKS, SALFORD, MANCHESTER.

CASEMENTS & FRAMES of No. 20 SECTION, registered (see opposite page), in steel, to open outwards. Guaranteed weather-tight.

The Specification for this section is the same as that given on page 8 both for the side hung and top hung casements.

Casements & Frames, side hung, opening outwards.					Fixed Lights.		
Height.	Width.	Qual. 1.	Qual. 2.	Qual. 3.	Same sections as the Casements	Of a sec- tion giving same sight line & same plane of glass as the Casements	Angle Iron.
2ft. and under . . .	2ft. & under	38/6	35/-	34/-	20/-	15/-	5/6
Above 2ft. & under 3ft.	„ „	39/6	36/-	35/-	21/-	15/6	6/-
3ft. & under 3ft. 6in.	„ „	41/-	37/6	36/6	22/-	16/-	6/6
3ft. 6in. & under 4ft.	„ „	43/6	40/-	39/-	24/-	18/-	8/-
4ft. & under 4ft. 6in.	„ „	44/6	41/-	40/-	25/-	19/-	9/-
4ft. 6in. to 5ft. . .	„ „	62/6	57/6	55/-	27/-	20/-	10/-
Above 5ft. & up to 6ft.	„ „	72/6	67/6	65/-	30/-	22/6	12/-

NOTE. Casements of this section have been successfully made up to 10ft. in height.

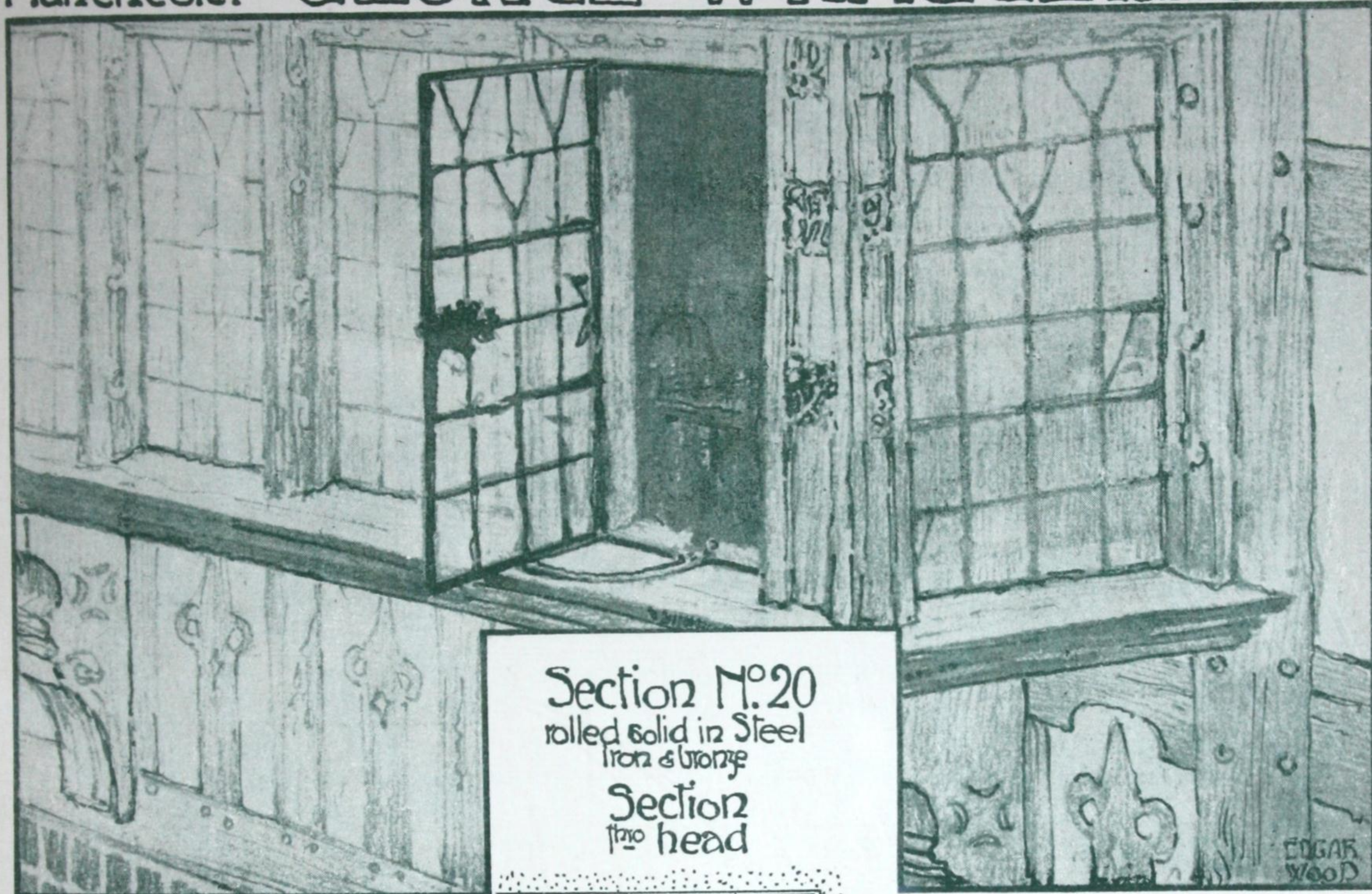
Casements & Frames, top hung to push out.				
Height.	Width.	Quality 1.	Quality 2.	Quality 3.
2ft. and under . . .	2ft. & under	31/-	30/-	29/6
Above 2ft. & under 2ft. 6in.	„ „	31/6	30/6	30/-
2ft. 6in. and under 3ft. .	„ „	32/-	31/-	30/6
3ft. and up to 3ft. 6in. .	„ „	36/-	35/-	34/6

The prices of each section illustrated in this Catalogue are grouped together on pages 32 & 33, so that easy comparison can at once be made. For complete list of EXTRAS see page 34. For designs of FITTINGS, see pages 37 to 47.
The above section is made in BRONZE, prices on application.

Wardry metal
works Salford
Manchester

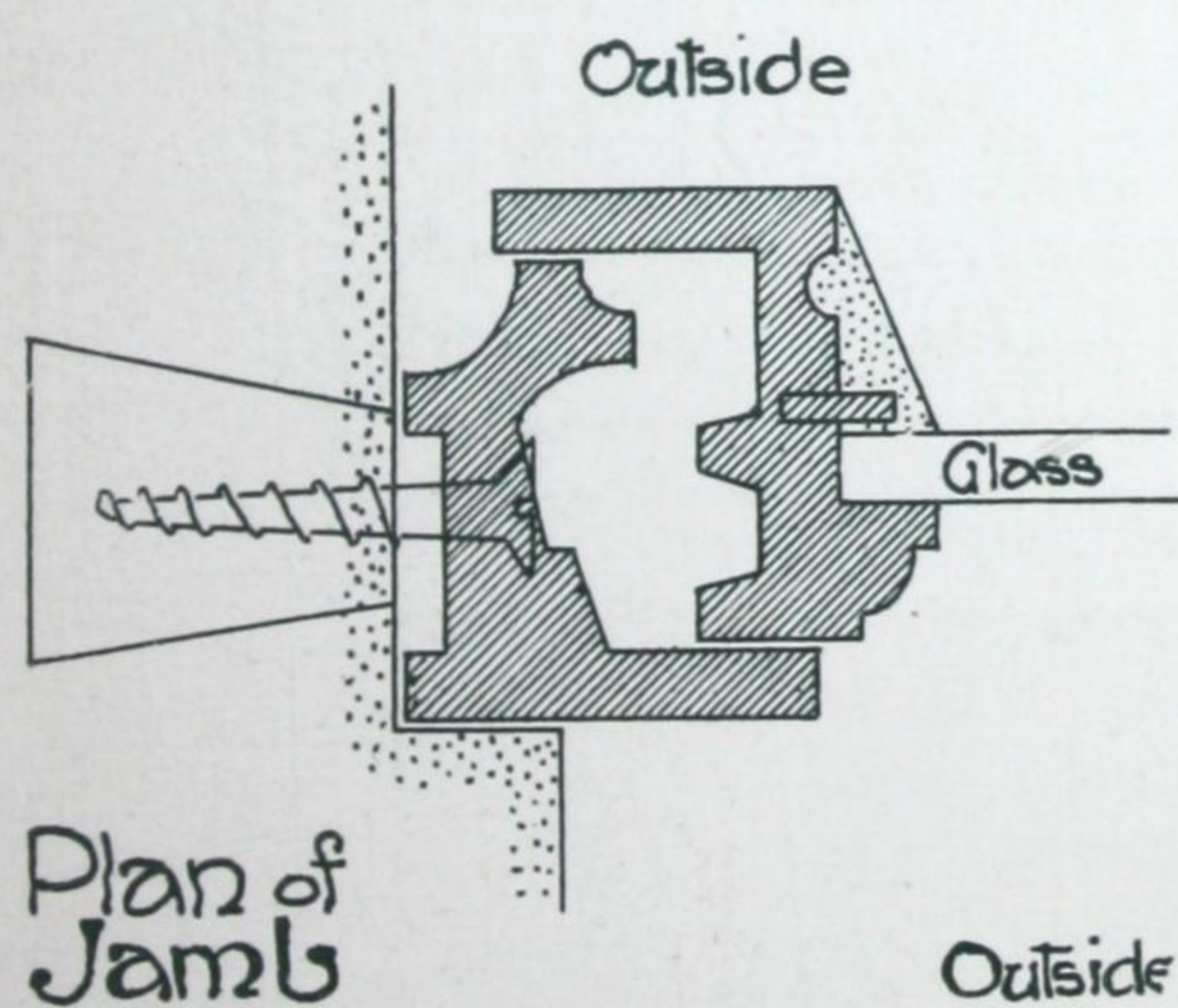
GEORGE WRAGGE

22 Surrey St
Strand
London W.C



Section No 20
rolled solid in Steel
Iron & Bronze
Section
thru head

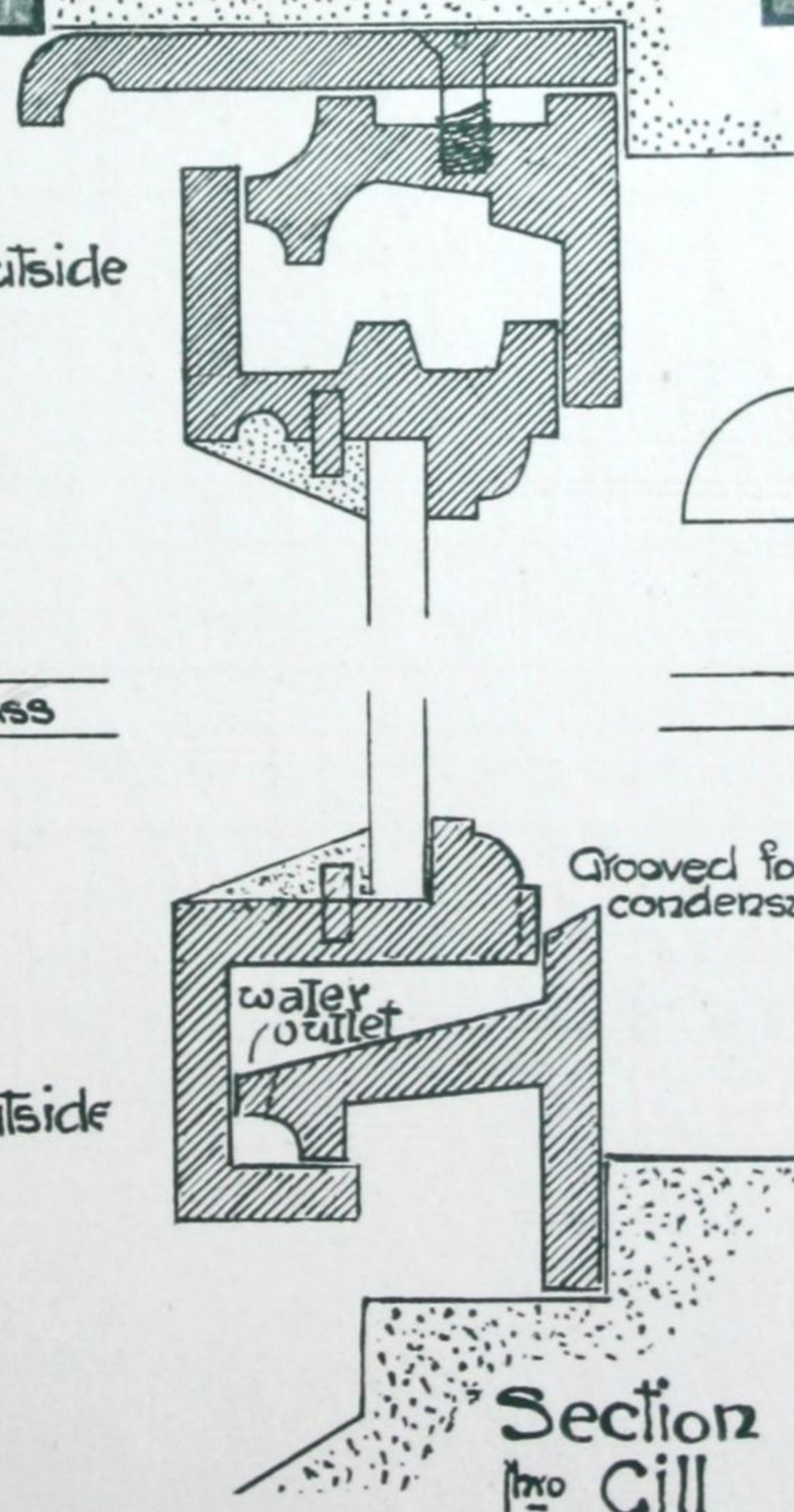
Guaranteed
weathertight



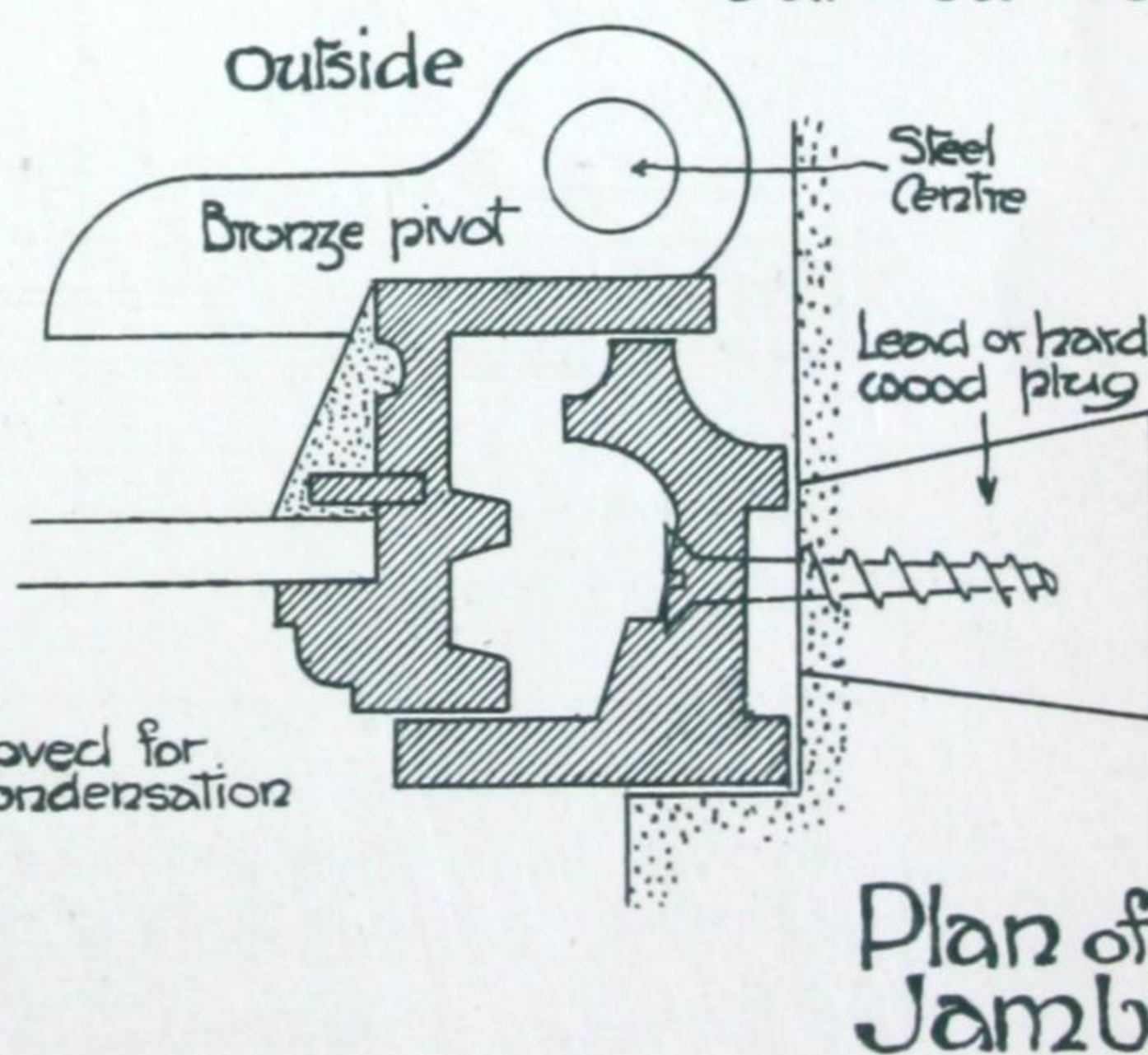
Full size
@ details

Outside

Outside



To open @
outwards



Reg No @
273662

NOTE: The above sections are specially adapted for grooved jambs etc., the
over frame being SUNK so that a bar can be fitted & the straight joint
as in ordinary flat sections avoided



GEORGE WRAGGE, WARDRY METAL WORKS, SALFORD, MANCHESTER.

CASEMENTS & FRAMES OF No. 21 SECTION, registered (see opposite page), in steel, to open inwards. Guaranteed weather-tight.

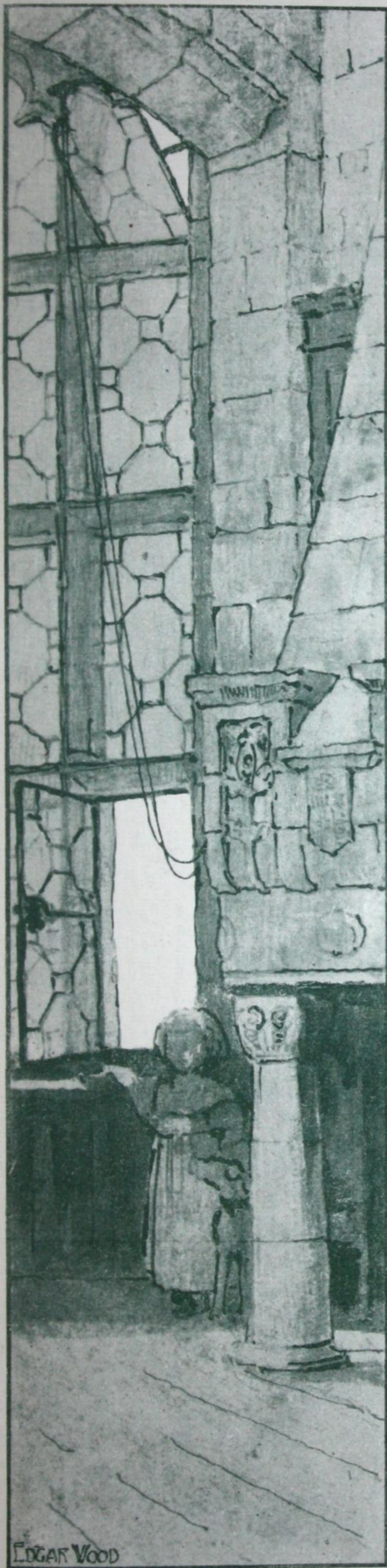
The Specification for this section is the same as that given on page 8 for the side hung casements, excepting that they are fitted with slide bolts 4ft. and upwards in height, and the stays are an adaptation of No. 94 (see page 47).

Casements & Frames, side hung, opening inwards.					Fixed Lights.		
Height.	Width.	Qual. 1.	Qual. 2.	Qual. 3.	Same sections as the Casements	Of a sec- tion giving same sight line & same plane of glass as the Casements	Angle Iron.
2ft. and under - -	2ft. & under	43/6	40/-	39/-	20/-	15/-	5/6
Above 2ft. & under 3ft.	„ „	44/6	41/-	40/-	21/-	15/6	6/-
3ft. & under 3ft. 6in.	„ „	46/-	42/6	41/6	22/-	16/-	6/6
3ft. 6in. & under 4ft.	„ „	48/6	45/-	44/-	24/-	18/-	8/-
4ft. & under 4ft. 6in.	„ „	67/6	62/6	60/-	25/-	19/-	9/-
4ft. 6in. to 5ft. - -	„ „	70/-	65/-	62/6	27/-	20/-	10/-
Above 5ft. & up to 6ft.	„ „	77/6	72/6	70/-	30/-	22/6	12/-

NOTE. Casements of this section have been successfully made up to 10ft. high.

The prices of each section illustrated in this Catalogue are grouped together on pages 32 & 33, so that easy comparison can at once be made. For complete list of EXTRAS see page 34. For designs of FITTINGS, see pages 37 to 47.

The above section is made in BRONZE, prices on application.



EDGAR WOOD

GEORGE WRAGGE

Wardry metal
works Salford
Manchester

22 Surrey St
Strand
London W.C.

METAL CASEMENTS & FRAMES
in Steel iron & bronze

Guaranteed
weathertight

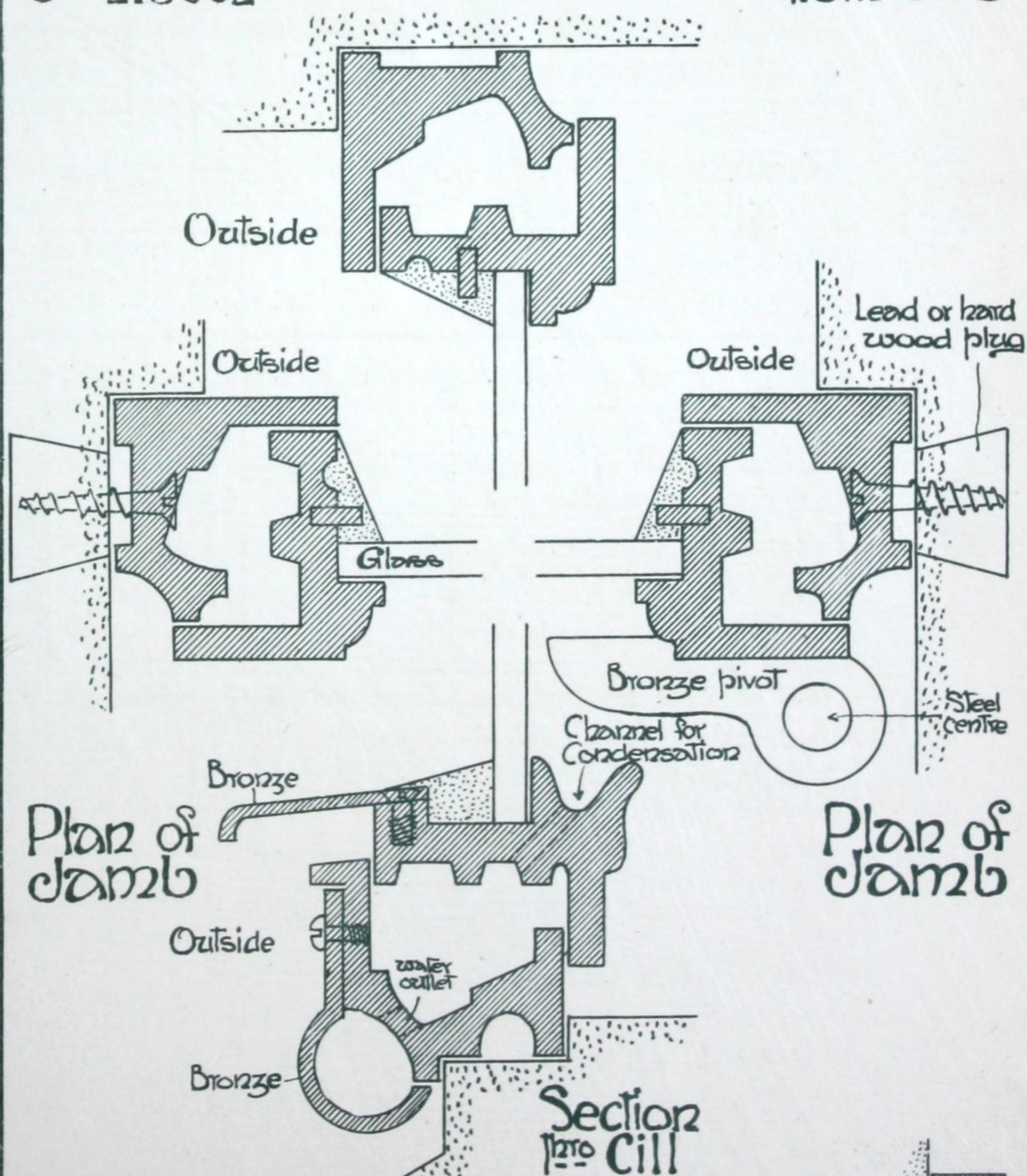
Section No 21
rolled solid in Steel

Full size ©
© details

Reg. Nos ©
© 274249
© 273663
© 273662

Section
thru head

To open
Inwards
or fall back
from cill ©



NOTE. The above sections are specially adapted for grooved
jamb etc. the outer frame being sunk so that a bar can be
fitted & the straight joint as in ordinary flat sections avoided



GEORGE WRAGGE

WARDRY METAL WORKS, SALFORD, MANCHESTER.

CASEMENTS & FRAMES OF No. 22 SECTION, registered (see opposite page), in steel, to swing on centres. Guaranteed weather-tight.

Specification to which the price list below is subject.

All Casements prepared to receive glass in one square & with square heads, to be rivetted and brazed and hung on coinage metal rule jointed centres, with steel pin, and fitted with eyes at top and pulley and eye at bottom, to open and close by cords.

NOTE. Special quotations will be given for rod or other gearing (see page 50).

Casements & Frames, centre hung.				
Height.		Width.		Circular.
2ft. and under	-	2ft. and under	36/6	44/-
2ft. and under 2ft. 6in.	-	” ”	37/6	45/-
2ft. 6in. and under 3ft.	-	” ”	38/6	47/6
3ft. and up to 4ft.	-	” ”	42/6	52/6

The prices of each section illustrated in this Catalogue are grouped together on pages 32 & 33, so that easy comparison can at once be made. For complete list of EXTRAS, see page 34. For designs of FITTINGS, see pages 37 to 47. The above section is made in BRONZE, prices on application.



GEORGE WRAGGE

Wardry metal
works Salford
Manchester

22 Surrey St
Strand
London W.C.

METAL CASEMENTS & FRAMES
in Steel iron & bronze

Guaranteed
weatherlight

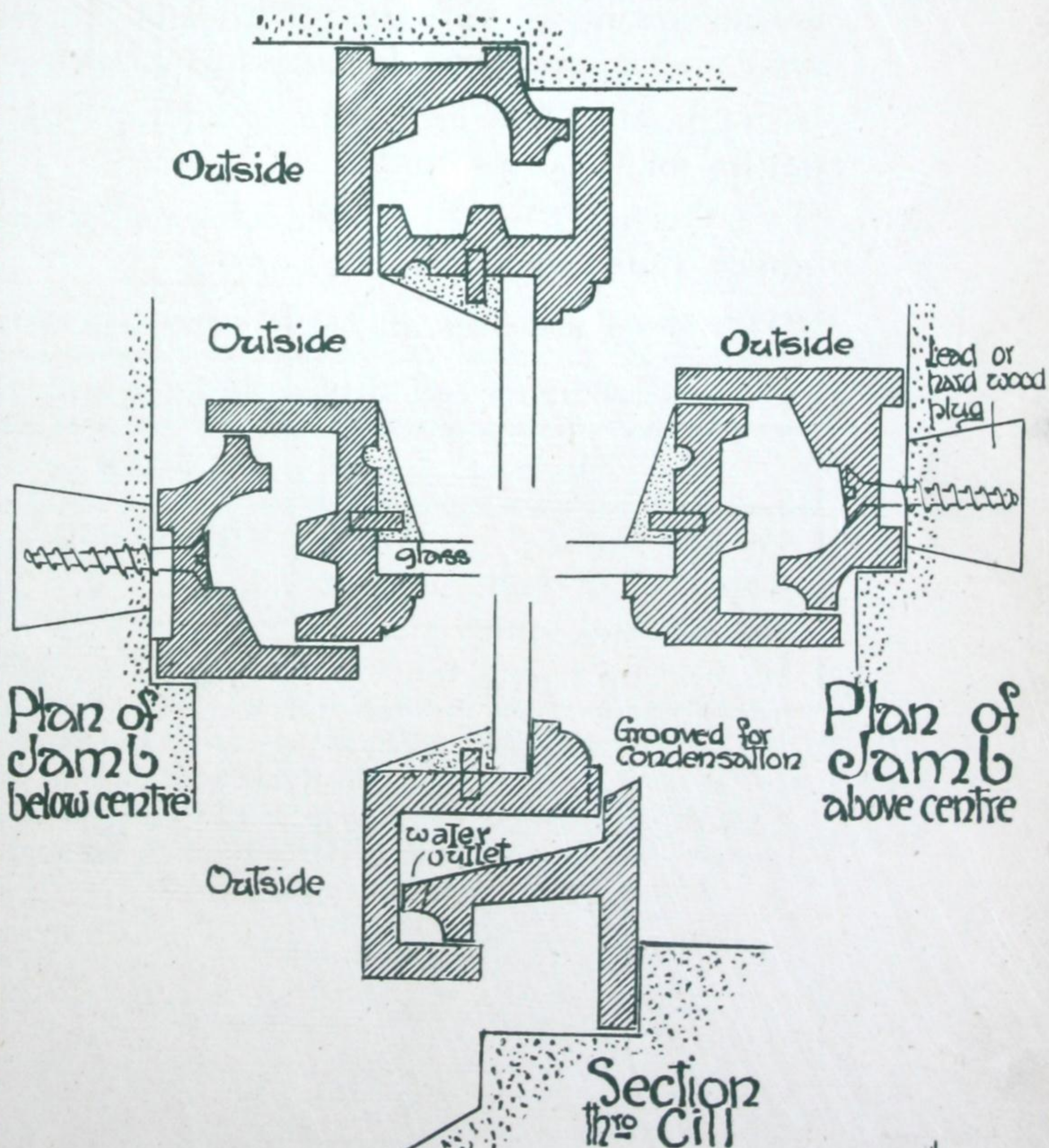
Section N^o 22
in steel

Full size ©
© details

Reg N^o ©
© 273662

To swing
on Coinage
metal centres

Section
thru head



NOTE: The above sections are specially adapted for grooved
jamb etc., the outer frame being SUIT so that a bar can be
filled, & the straight joint, as in ordinary flat sections, avoided



GEORGE WRAGGE

WARDRY METAL WORKS, SALFORD, MANCHESTER.

CASEMENTS & FRAMES OF No. 23 SECTION, registered (see opposite page), in steel, hung at cill, to fall inwards. Guaranteed weathertight.

Specification to which the price list below is subject.

All casements to have square heads to be prepared to receive glass in one square, all corners rivetted and brazed, and hung on hard brass pivots fitted with lathe-turned centres in steel or bronze.

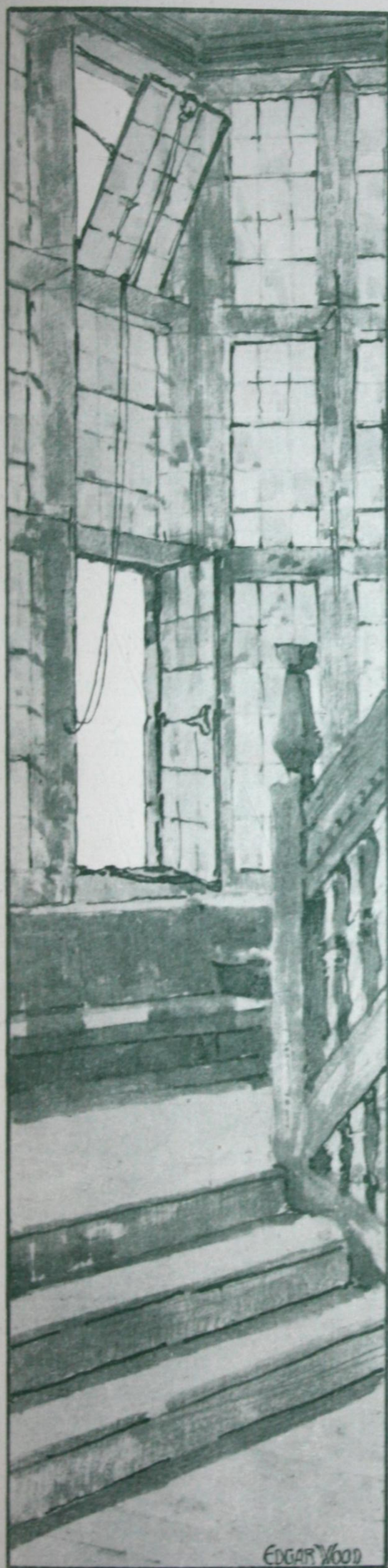
No. 1 QUALITY, to be fitted with folding coinage metal side guides, pulleys and eyes for cords.

No 2 QUALITY, to be fitted with malleable iron projecting side guides, pulleys and eyes for cords.

NOTE. Special quotations will be given for rod or other gearing (see page 50).

Casements and Frames hung at cill, to fall back.			
Height.	Width	Quality 1.	Quality 2.
2ft. and under - -	2ft. and under	37/6	33/-
Above 2ft. & under 2ft. 6in.	” ”	40/-	35/6
2ft. 6in. and under 3ft. -	” ”	41/6	37/-
3ft. and up to 3ft. 6in. -	” ”	45/-	40/6

The prices of each section illustrated in this Catalogue are grouped together on pages 32 & 33, so that easy comparison can at once be made. For complete list of EXTRAS, see page 34. For designs of FITTINGS, see pages 37 to 47.
The above section is made in BRONZE, prices on application.



GEORGE WRAGGE

Wardry metal
works Salford
Manchester

22 Surrey St
Strand
London W.C.

METAL CASEMENTS & FRAMES
in Steel iron & bronze

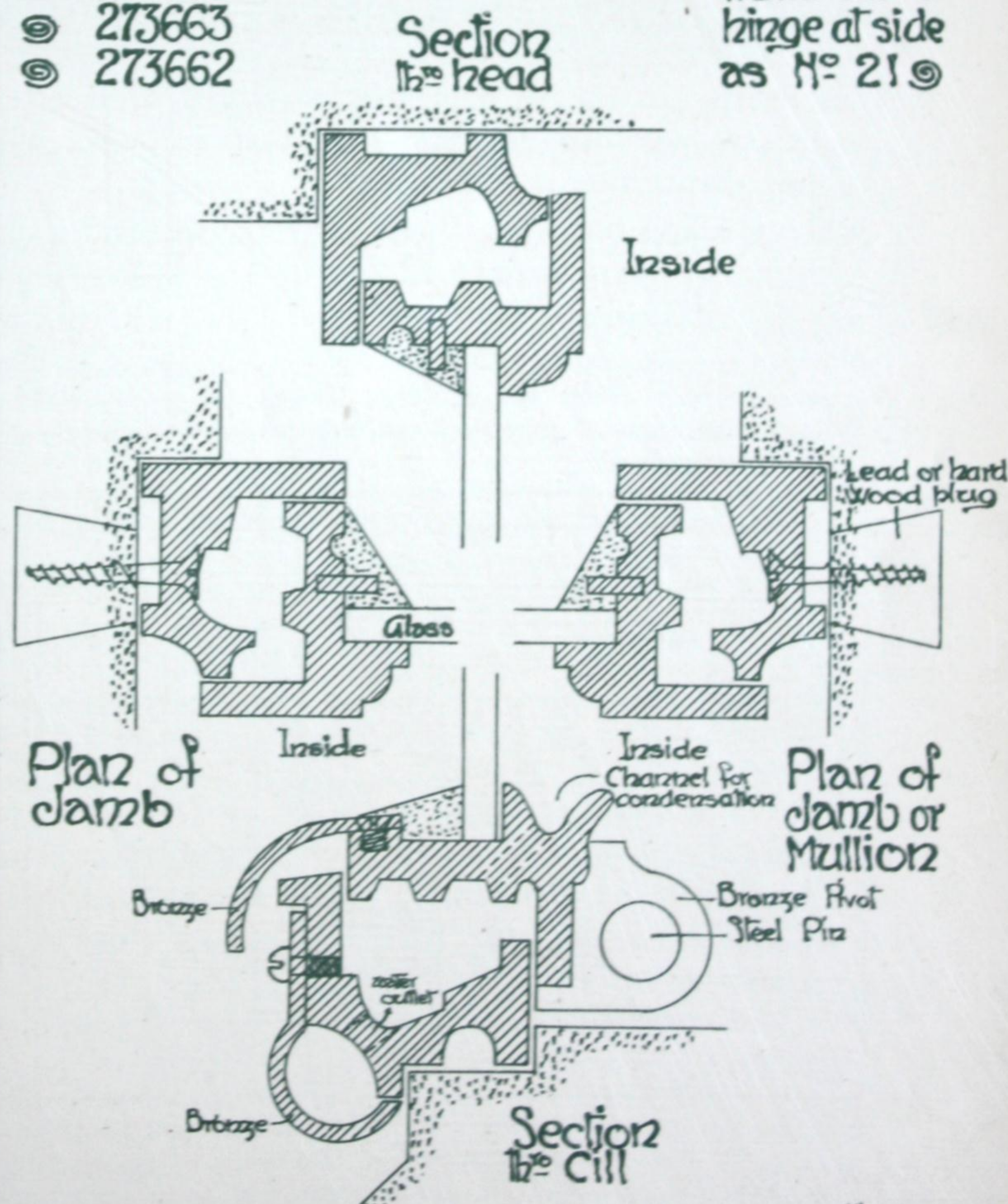
Guaranteed
weatheright

Section N°23
in Steel

Full size &
& details

Reg. N°s &
& 274249
& 273663
& 273662

To fall back
from cill &
hinge at side
as N° 21 &



NOTE - The above sections are specially adapted for grooved
jambos etc, the outer frame being sunk so that a bar can be
fitted & the straight joint as in ordinary flat sections avoided.

GEORGE WRAGGE,

WARDRY METAL WORKS, SALFORD, MANCHESTER.

CASEMENTS & FRAMES of No. 24 SECTION, registered (see opposite page), in steel, to open outwards, hung double folding, WITHOUT CENTRE MEETING RAIL. Guaranteed weather-tight.

SPECIFICATION to which the price list below is subject.

Casements to have square heads, and prepared to receive glass in one square. All corners rivetted and brazed.

No. 1 QUALITY, to be fitted with 2 handles No. 86 (see page 37), 2 small bolts, one top and bottom, and 2 sliding stays No. 94 (see page 47); those casements 4ft. 6in. in height and upwards to be fitted with Espagnolette bolt securing the two frames at the top, centre and bottom in one movement. Casements to be hung on hard brass pivots working on lathe-turned steel or bronze centres. All fittings to be of coinage metal, polished and lacquered, toned or bronzed.

No. 2 QUALITY, to be fitted with 2 handles No. 84 (see page 37), 2 small bolts, one top and bottom, and 2 stays No. 92 with 2 pins (see page 47); those casements 4ft. 6in. in height and upwards to be fitted with Espagnolette bolt as before described, and hung on pivots as above. All fittings to be of coinage metal, plainly filed.

No. 3 QUALITY, to be fitted with handles and stays as in No. 2 quality and with our ordinary pattern sliding bolt to casements 4ft. 6in. and upwards in height. All fittings to be of malleable iron with working parts in coinage metal.

NOTE. Any other fittings illustrated in this Catalogue can be adopted in preference to the above at *pro rata* prices if desired, or special designs and prices will be submitted.

When casements are required as doors, stays are not used, and their value (see page 46) is deducted from this price list.

Casements and Frames to open outwards, hung double folding (without centre meeting rail).					Fixed Lights.		
Height.	Width. (Over the two Casements.)	Quality 1.	Quality 2.	Quality 3.	Same sections as the Casements.	Of a section giving same sight line & same plane of glass as the Casements.	Angle Iron.
2ft. and under - -	4ft. & under	72/6	62/6	59/6	32/6	20/-	10/-
Above 2ft. & under 3ft 6in	" "	80/-	70/-	67/-	37/6	23/6	11/-
" 3ft. 6in. & under 4ft 6in	" "	87/6	77/6	74/6	40/6	25/-	12/6
4ft. 6in. and up to 6ft.	" "	125/-	115/-	100/-	50/-	31/6	17/6
Above 6ft. & under 6ft. 6in.	" "	150/-	140/-	125/-	62/6	38/6	20/-
6ft. 6in. and under 7ft.	" "	160/-	150/-	135/-	67/6	41/-	22/-
7ft. and under 8ft. -	" "	170/-	160/-	145/-	72/6	45/-	24/6
8ft. and under 9ft. -	" "	180/-	170/-	155/-	77/6	47/6	27/-
9ft. and up to 10ft. -	" "	190/-	180/-	165/-	82/6	50/-	29/-

NOTE. For casements opening INWARDS in pairs, and without centre meeting rail (section No. 21A), add 10% to the above price list. The prices of the fixed lights will remain as above.

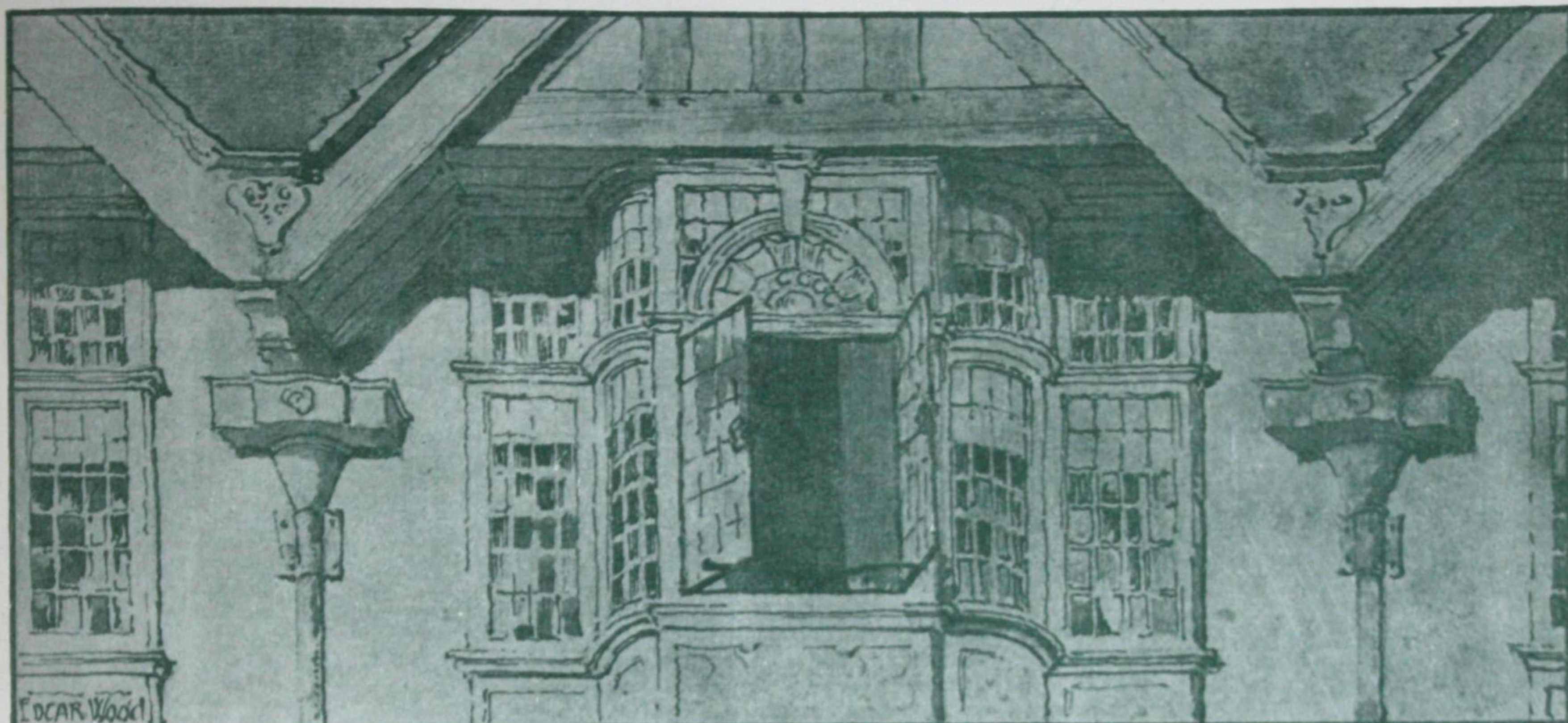
The prices of each section illustrated in this Catalogue are grouped together on pages 32 & 33, so that easy comparison can at once be made. For complete list of EXTRAS see page 34. For designs of FITTINGS, see pages 37 to 47.

The above section is made in BRONZE, prices on application.

Wardry metal
works Salford
Manchester

GEORGE WRAGGE

22 Surrey St
Strand
London W.C



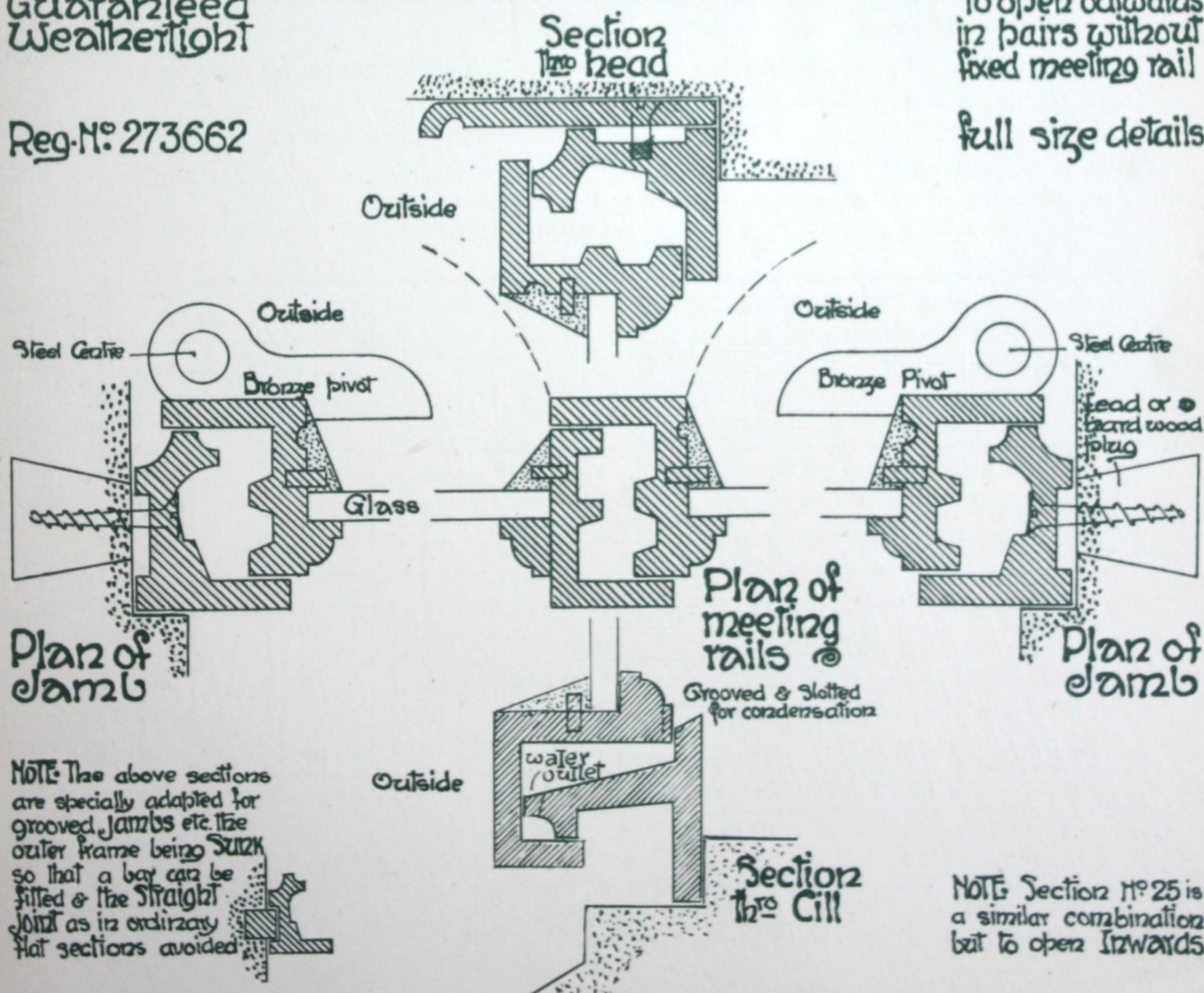
Section N° 24
in Steel

Guaranteed
Weathertight

Reg. N° 273662

To open outwards
in pairs without
fixed meeting rail

full size details



NOTE: The above sections
are specially adapted for
grooved jambs etc. the
outer frame being SURK
so that a bay can be
fitted & the straight
joint as in ordinary
flat sections avoided

NOTE: Section N° 25 is
a similar combination
but to open inwards

GEORGE WRAGGE, WARDRY METAL WORKS, SALFORD, MANCHESTER.

CASEMENTS & FRAMES of No. 4 SECTION (see opposite page) in wrought iron, to open outwards. Weather-tight under ordinary conditions SPECIFICATION to which the price list below is subject.

SIDE HUNG CASEMENTS.

Casements to have square heads, and prepared to receive glass in one square. All corners rivetted and brazed.

No. 2 QUALITY, to be fitted with handle No. 84 (see page 37), and stay with two pins, No. 92 (see page 47), of coinage metal, plainly filed.

No. 3 QUALITY, to be fitted with similar fittings, but in malleable iron, having coinage metal working parts.

TOP HUNG CASEMENTS.

No. 2 QUALITY, to be fitted with No. 92 stay and 2 pins (see page 47), in coinage metal, plainly filed.

No. 3 QUALITY, to be fitted with No. 92 stay and 2 pins (see page 47), in malleable iron, with coinage metal parts.

Casements & Frames, side hung, opening outwards.				Fixed Lights.		
Height.	Width.	Quality 2.	Quality 3.	Same sections as the Casements.	Of a section giving same sight line & same plane of glass as the Casements.	Angle Iron.
2ft. and under -	2ft. & under	29/-	28/-	15/6	12/6	5/6
Above 2ft. & under 3ft.	„ „	30/-	29/-	16/6	13/-	6/-
3ft. and under 3ft. 6in.	„ „	31/-	30/-	17/6	13/6	6/6
3ft. 6in. and under 4ft.	„ „	32/6	31/6	19/6	15/6	8/-
4ft. and under 4ft. 6in.	„ „	34/6	33/6	20/6	16/6	9/-
4ft. 6in. and up to 5ft.	„ „	43/6	40/-	22/6	17/6	10/-

NOTE. This section is not recommended for Casements over 5ft. high.

Casements & Frames, top hung, to push out.			
Height.	Width.	Quality 2.	Quality 3.
2ft. and under - - -	2ft. and under	25/6	25/-
Above 2ft. and under 2ft. 6in.	„ „	26/-	25/6
2ft. 6in. and under 3ft. - -	„ „	27/-	26/6
3ft. and up to 3ft. 6in. - -	„ „	28/6	28/-

The prices of each section illustrated in this Catalogue are grouped together on pages 32 & 33, so that easy comparison can at once be made. For complete list of EXTRAS, see page 34. For designs of FITTINGS, see pages 37 to 47.

The above section is made in BRONZE, prices on application.



GEORGE WRAGGE

Wardro metal
works Salford
Manchester

22 Surrey St
Strand
London W.C

METAL CASEMENTS & FRAMES
in Steel iron & bronze

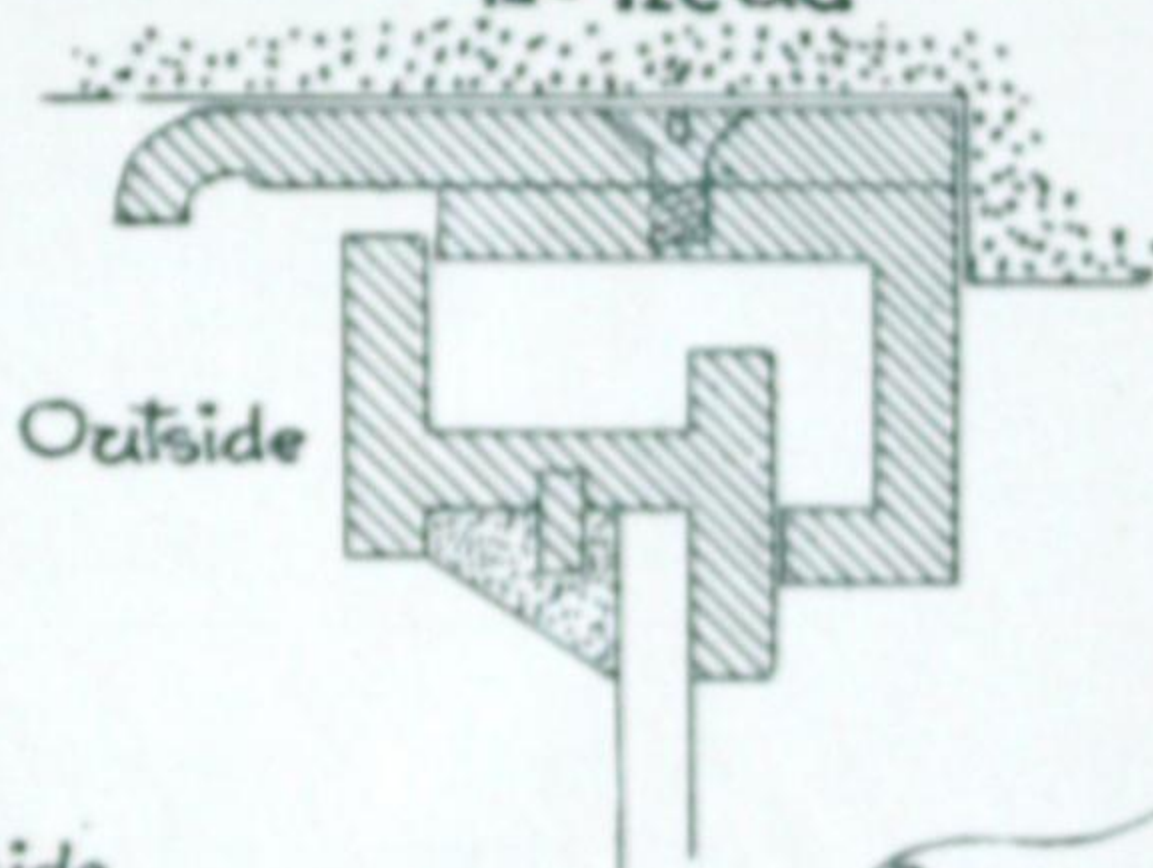
Weatherlight
under
ordinary
conditions

Section No 4
1/2 Iron

To open
outwards

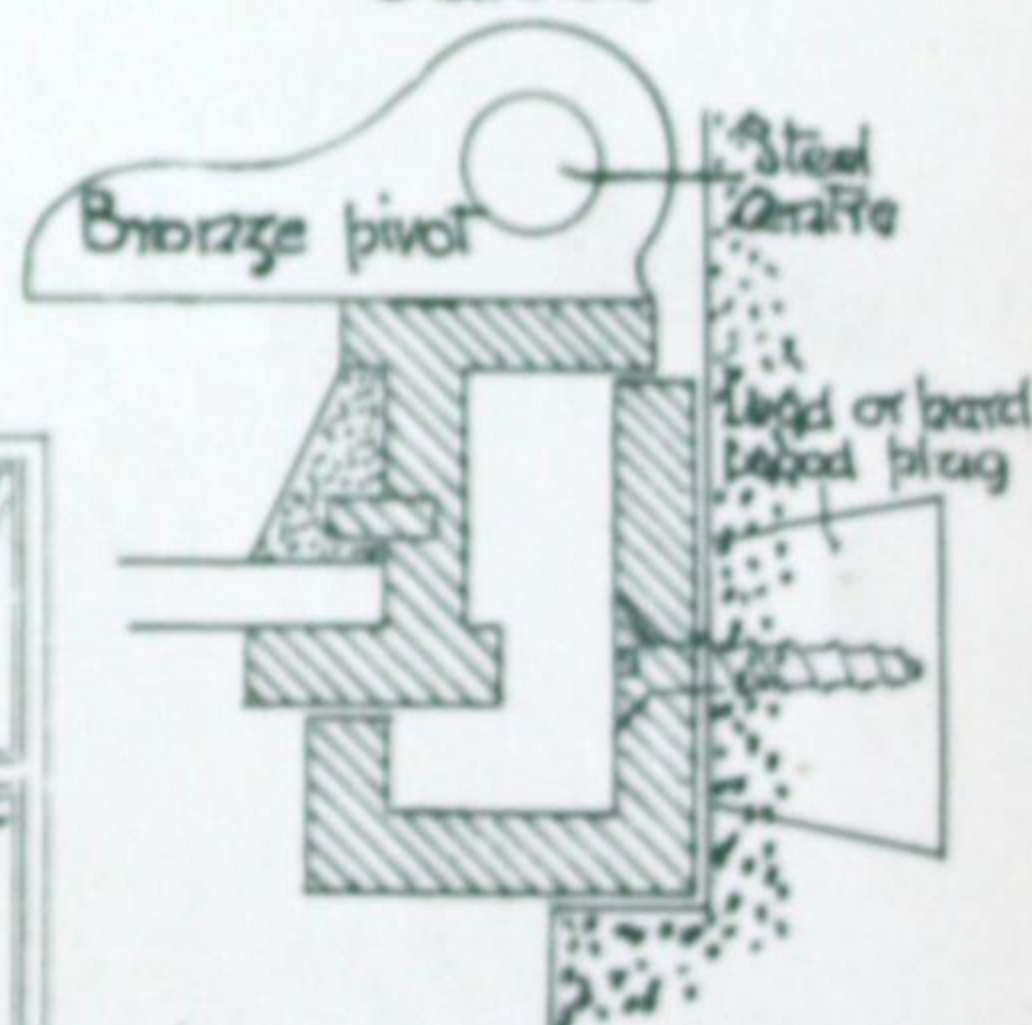
Full Size
details

Section
the head



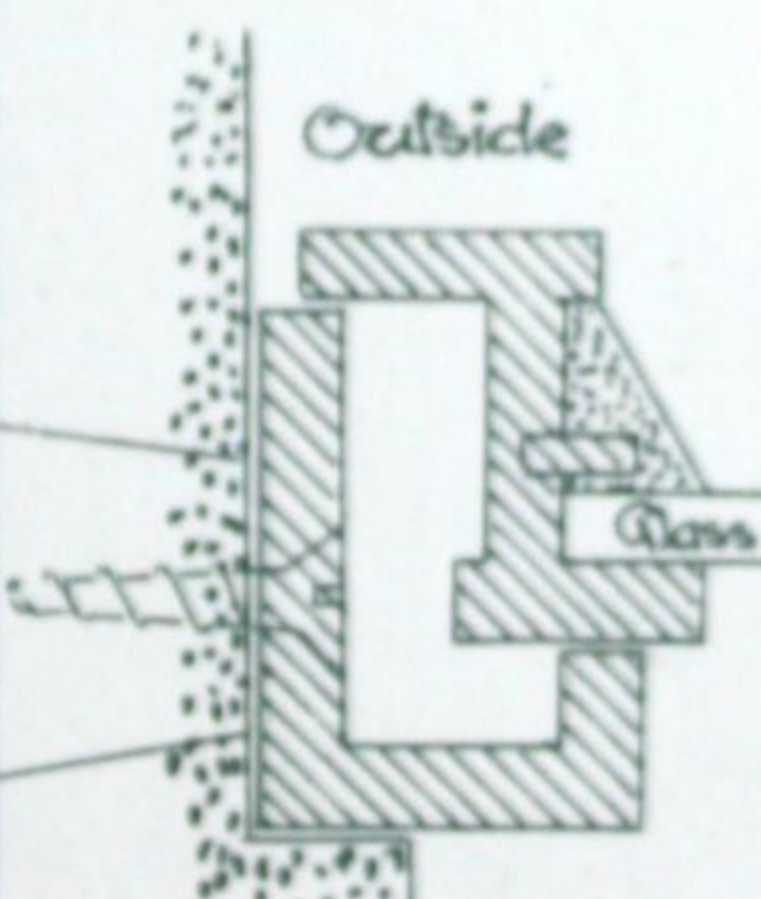
Outside

Outside



Steel anchor

Wood or hard
board plug

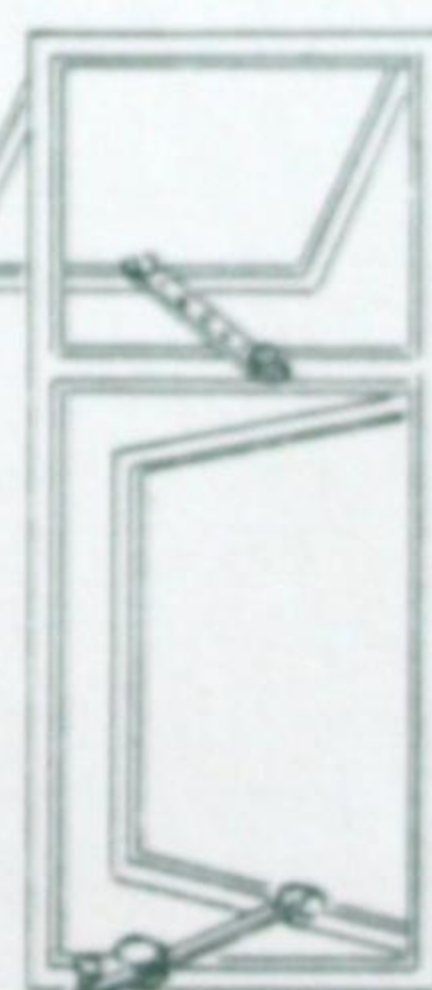


Outside

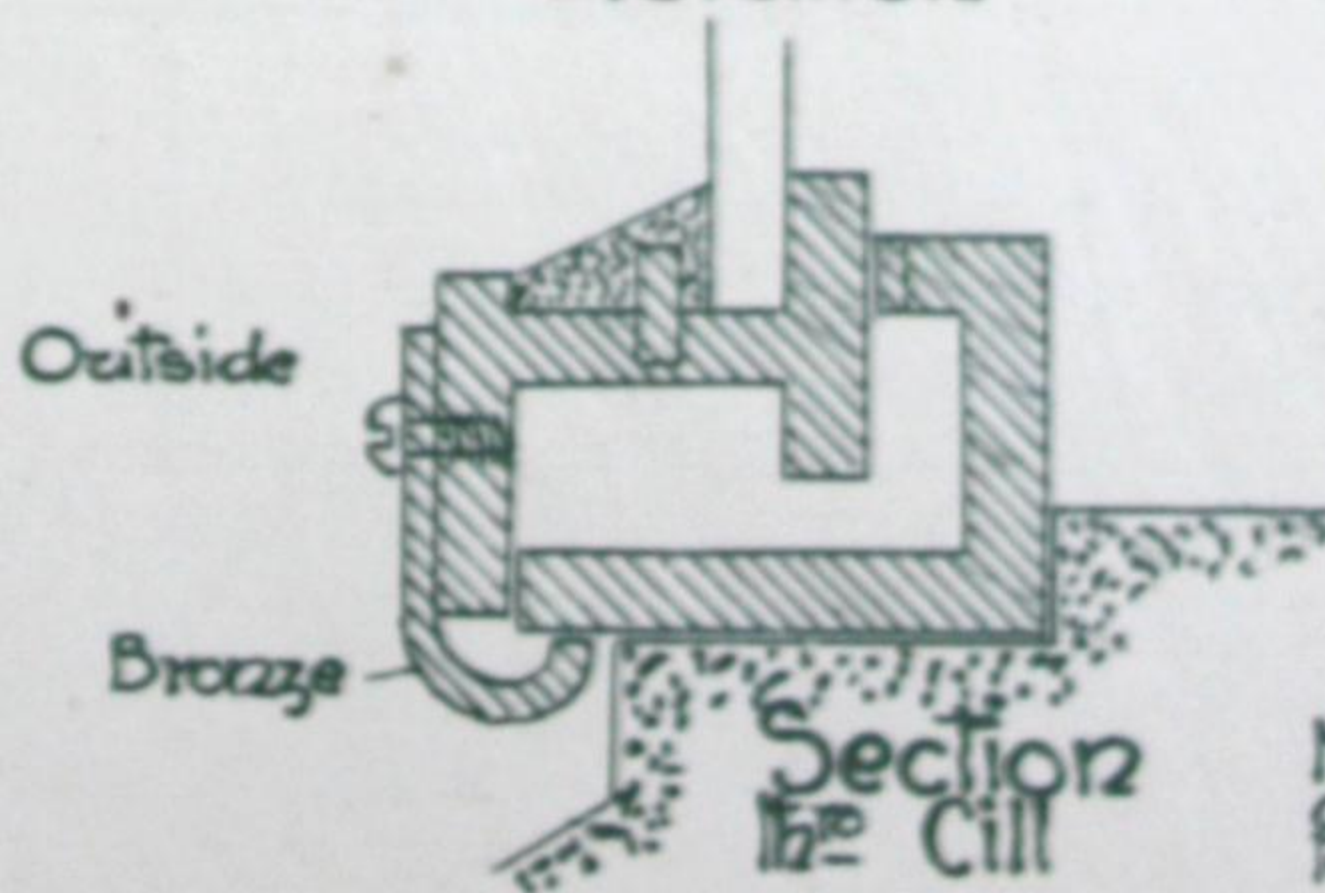
Glass

Plan of
Jamb

Plan of
Jamb



Elevation



Outside

Bronze

Section
the sill

NOTE: This casement
can be prepared
to suit any details

GEORGE WRAGGE, WARDRY METAL WORKS, SALFORD, MANCHESTER.

CASEMENTS & FRAMES of No. 5 SECTION (see opposite page) in wrought iron, to open outwards. Weather-tight under ordinary conditions SPECIFICATIONS to which the price lists below are subject.

SIDE HUNG CASEMENTS.

Casements to have square heads, and prepared to receive glass in one square. All corners rivetted and brazed.

No. 2 QUALITY, to be fitted with handle No. 84 (see page 37), and stay with two pins, No. 92 (see page 47), of coinage metal, plainly filed.

No. 3 QUALITY, to be fitted with similar fittings, but in malleable iron, having coinage metal working parts.

NOTE. Any other fittings illustrated in this Catalogue can be adopted in preference to the above at *pro rata* prices if desired, or special designs and prices will be submitted.

Casements & Frames, side hung, opening outwards.				Fixed Lights.		
Height.	Width.	Quality 2.	Quality 3.	Same sections as the Casements.	Of a section giving same sight line & same plane of glass as the Casements.	Angle Iron.
2ft. and under - -	2ft. & under	26/-	25/-	13/-	11/6	5/6
Above 2ft. & under 3ft.	„ „	27/-	26/-	14/-	12/-	6/-
3ft. and under 3ft. 6in.	„ „	28/-	27/-	15/-	12/6	6/6
3ft. 6in. and under 4ft.	„ „	30/-	29/-	17/-	14/6	8/-
4ft. and under 4ft. 6in.	„ „	31/6	30/6	18/-	15/6	9/-

NOTE. This section is not recommended for Casements over, say, 4ft. 3in. in height.

TOP HUNG CASEMENTS.

No. 2 QUALITY, to be fitted with No. 92 stay and 2 pins (see page 47), in coinage metal, plainly filed.

No. 3 QUALITY, to be fitted with No. 92 stay and 2 pins (see page 47), in malleable iron, with coinage metal parts.

NOTE. Special quotations will be given for rod or other gearing (see page 50).

Casements & Frames, top hung, to push out.			
Height.	Width.	Quality 2.	Quality 3.
2ft. and under - - -	2ft. and under	23/6	23/-
Above 2ft. and under 2ft. 6in.	„ „	24/-	23/6
2ft. 6in. and under 3ft. - -	„ „	25/-	24/6
3ft. and up to 3ft. 6in. - -	„ „	26/6	26/-

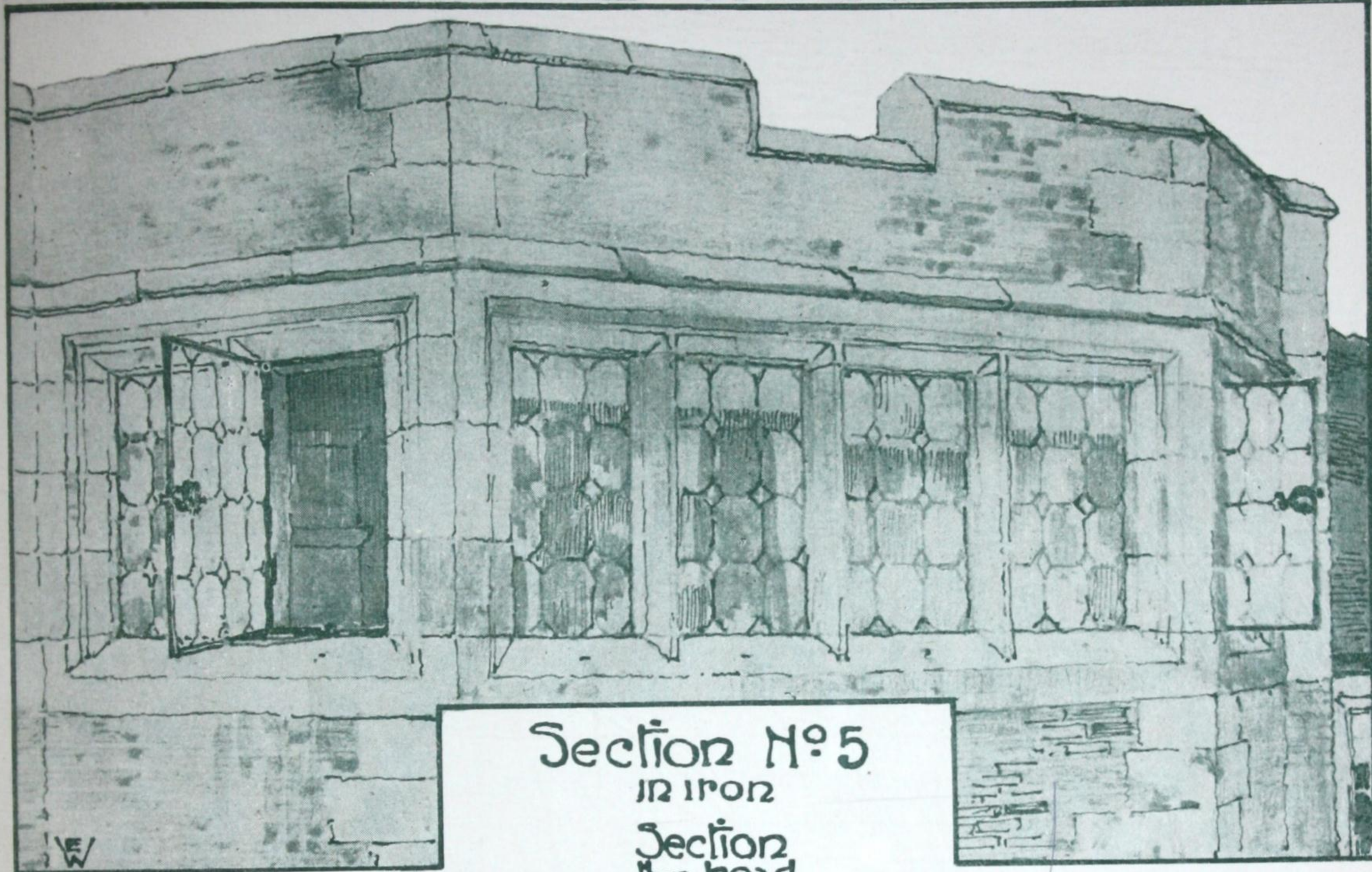
The prices of each section illustrated in this Catalogue are grouped together on pages 32 & 33, so that easy comparison can at once be made. For complete list of EXTRAS see page 34. For designs of FITTINGS, see pages 37 to 47.

The above section is made in BRONZE, prices on application.

Wardry metal
works Salford
Manchester

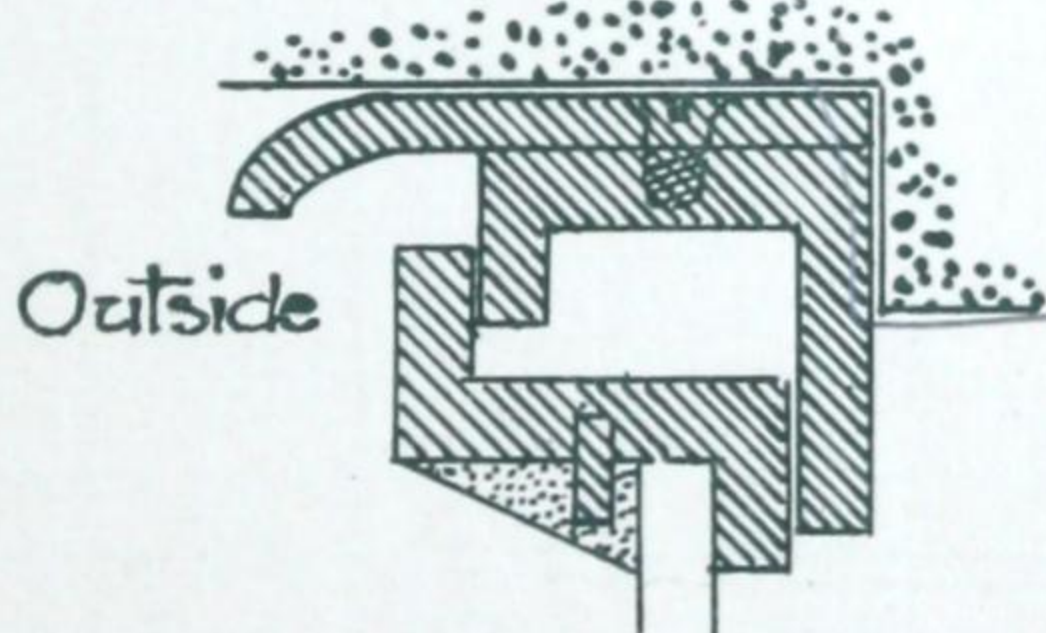
GEORGE WRAGGE

22 Surrey St
Strand
London W.C



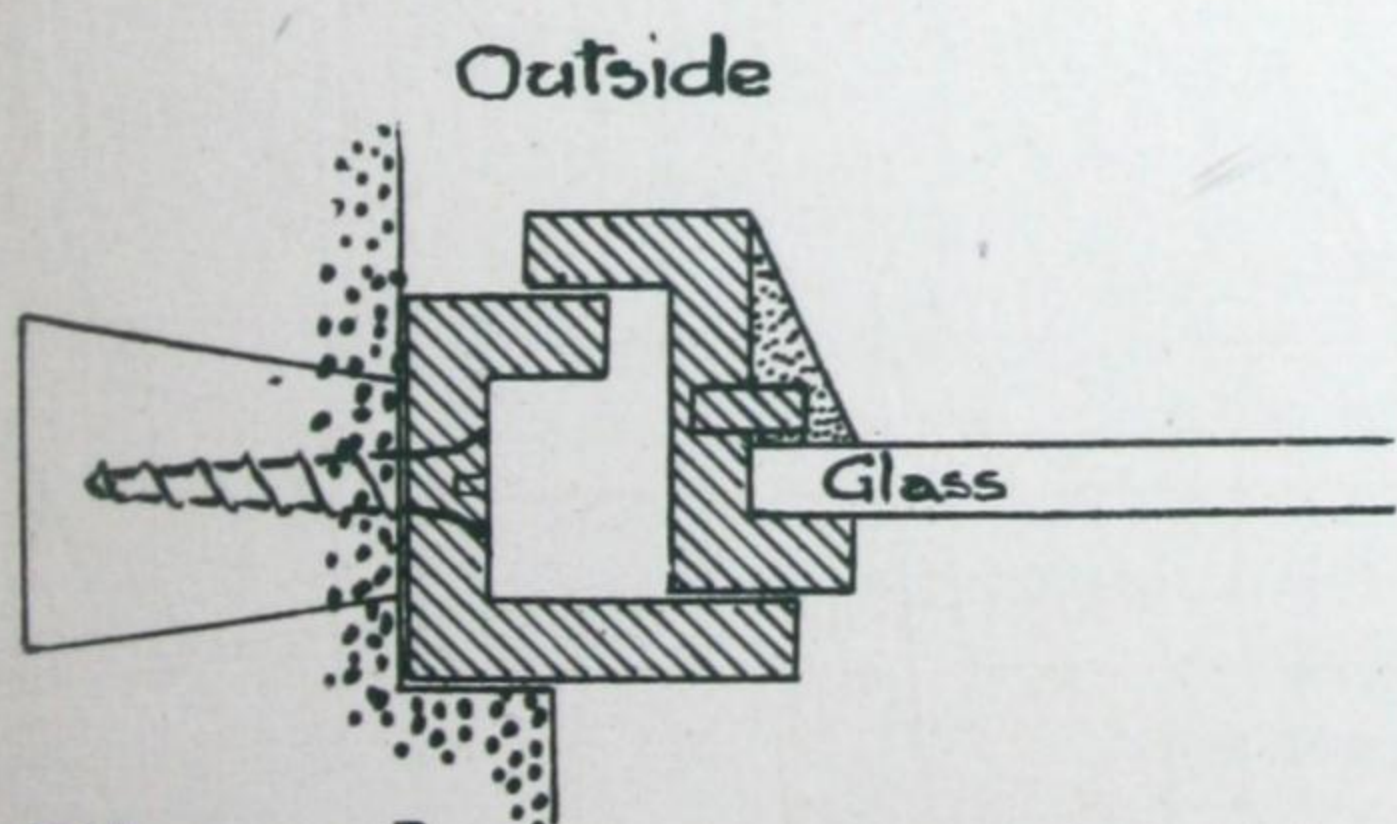
Section N° 5
in iron

Section
thro head

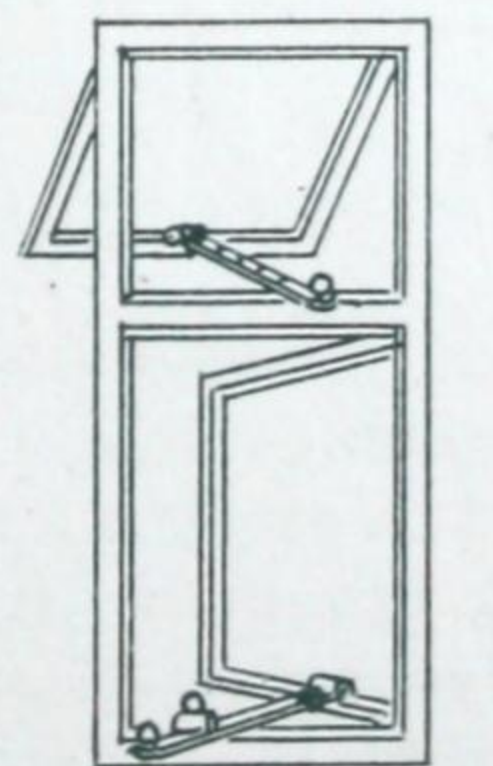


Full Size
details
to open
outwards

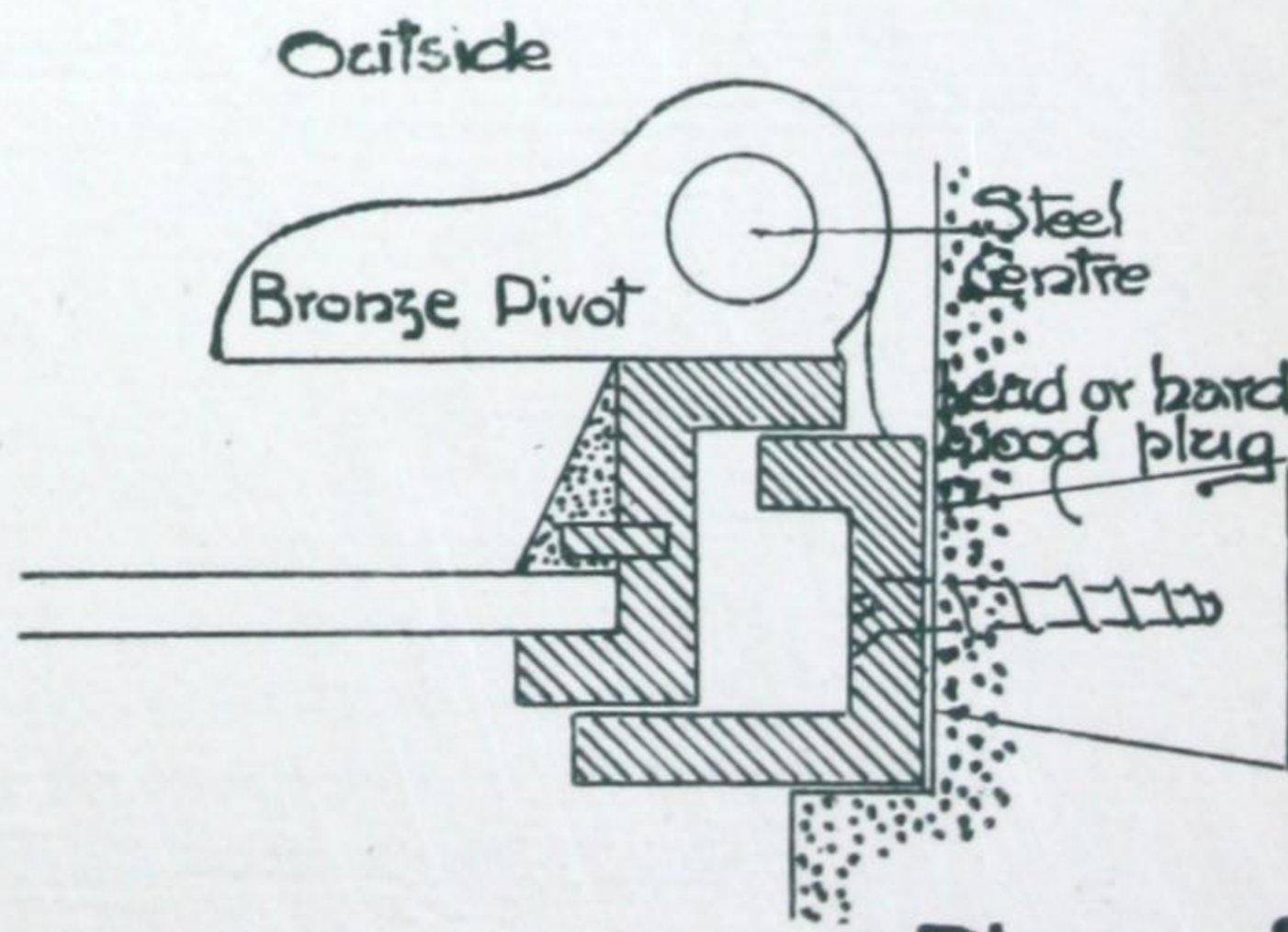
Weatherlight
under
ordinary
conditions



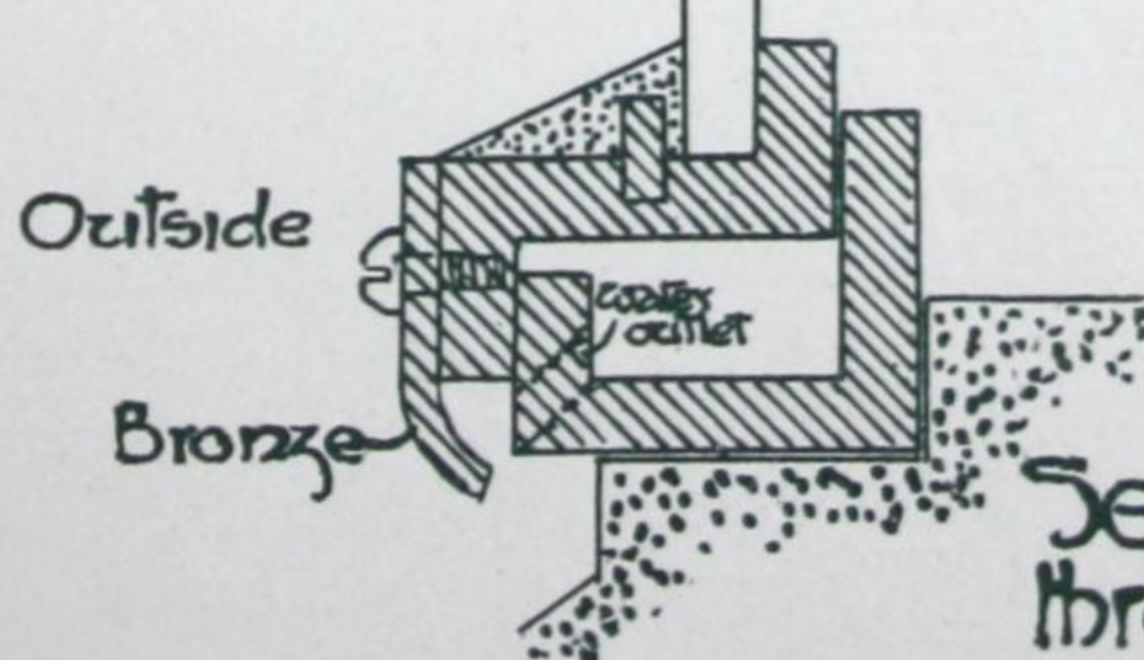
Plan of
Jamb



Elevation



Plan of
Jamb



Section
thro. Cill

NOTE: This Casement
can be prepared
to suit any details

GEORGE WRAGGE, WARDRY METAL WORKS, SALFORD, MANCHESTER.

CASEMENTS & FRAMES of No. 8 SECTION (see opposite page), in wrought iron, to open inwards. Weather-tight under ordinary conditions. SPECIFICATION to which the price list below is subject.
Casements to have square heads, and prepared to receive glass in one square. All corners rivetted and brazed.

No. 2 QUALITY, to be fitted with handle No. 84 (see page 37), and hook stay with 2 eyes No. 93 (see page 47), of coinage metal, plainly filed.
No. 3 QUALITY, to be fitted with similar fittings, but in malleable iron, having coinage metal working parts.

NOTE. Any other fittings illustrated in this Catalogue can be adopted in preference to the above at *pro rata* prices if desired, or special designs and prices will be submitted.

Casements & Frames, side hung, opening inwards.				Fixed Lights.		
Height.	Width.	Quality 2.	Quality 3.	Same sections as the Casements.	Of a section giving same sight line & same plane of glass as the Casements.	Angle Iron.
2ft. and under -	2ft. & under	27/6	26/6	13/-	11/6	5/6
Above 2ft. & under 3ft.	„ „	28/6	27/6	14/-	12/-	6/-
3ft. and under 3ft. 6in.	„ „	29/6	28/6	15/-	12/6	6/6
3ft. 6in. and under 4ft.	„ „	31/6	30/6	17/-	14/6	8/-
4ft. and under 4ft. 6in.	„ „	33/-	32/-	18/-	15/6	9/-

NOTE. This section is not recommended for Casements over, say, 4ft. 3in. in height. The prices of each section illustrated in this Catalogue are grouped together on pages 32 & 33, so that easy comparison can at once be made. For complete list of EXTRAS see page 34. For designs of FITTINGS, see pages 37 to 47.
The above section is made in BRONZE, prices on application.

Wardry metal
works Salford
Manchester

GEORGE WRAGGE

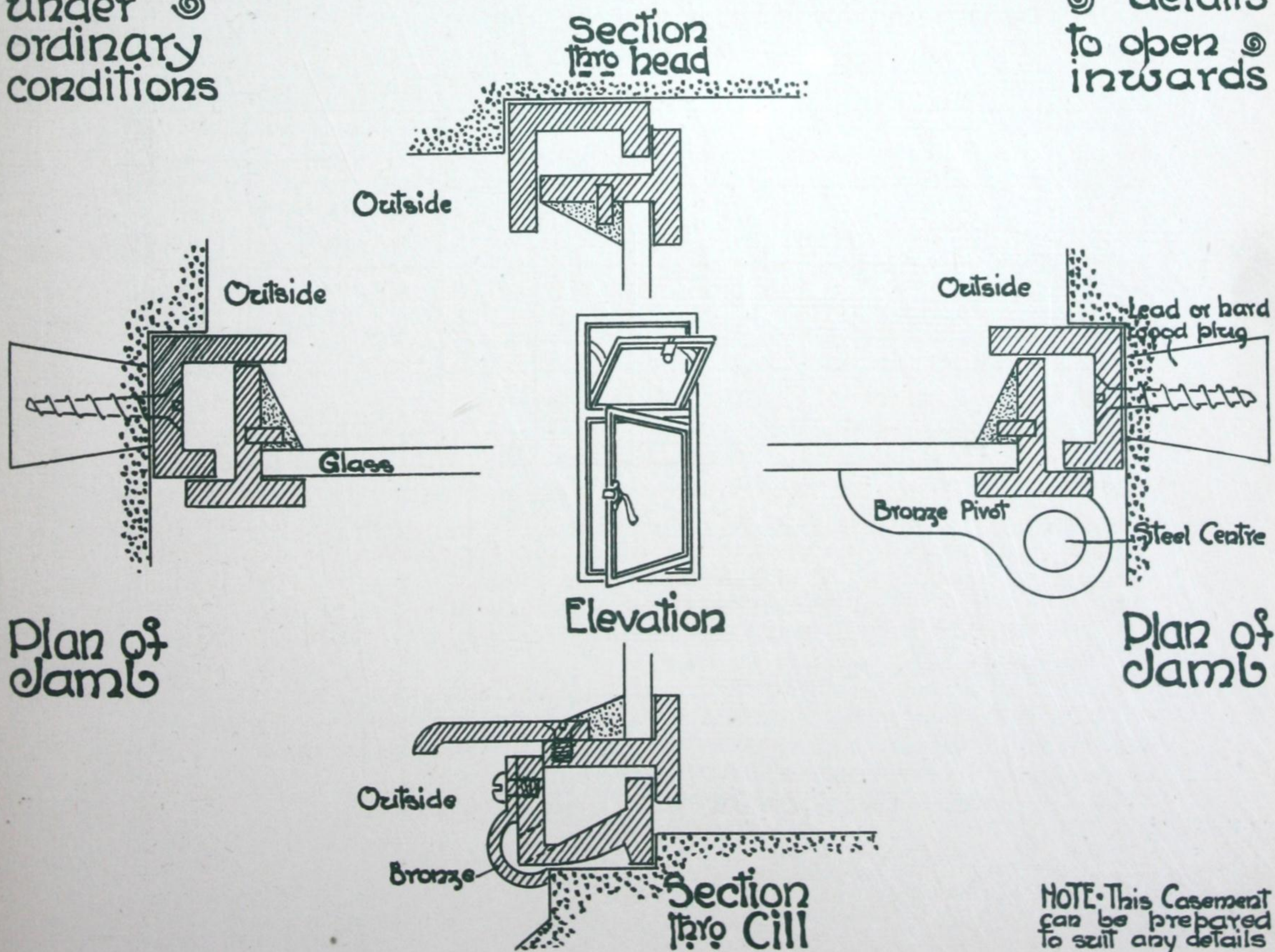
22 Surrey St
Strand
London W.C



Section N° 8
in Iron

Weathertight
under ☉
ordinary
conditions

Full size ☉
☉ details
to open ☉
inwards



NOTE-This Casement
can be prepared
to suit any details

GEORGE WRAGGE,

WARDRY METAL WORKS, SALFORD, MANCHESTER.

CASEMENTS & FRAMES of Nos. 9 & 10 SECTIONS (see opposite page) in wrought iron, hung at cill, to fall inwards. No. 9 Section is guaranteed weather-tight, and No. 10 is weather-tight under ordinary conditions.

Specification to which the price lists below are subject.

Casements to have square heads, and prepared to receive glass in one square. All corners rivetted and brazed.

No. 1 QUALITY, to be fitted with folding coinage metal side guides, pulleys and eyes for cords.

No. 2 QUALITY, to be fitted with malleable iron projecting side guides, pulleys and eyes for cords.

NOTE. Special quotations will be given for rod or other gearing (see page 50).

SECTION No 9.				
Casements and Frames hung at cill, to fall inwards.				
Height.	Width.	Quality 1.	Quality 2.	
2ft. and under - - -	2ft. and under	25/-	22/6	
Above 2ft. and under 3ft. -	„ „	26/-	23/6	
3ft. and up to 3ft. 6in. -	„ „	28/6	26/-	
Above 3ft. 6in. and up to 4ft. -	„ „	32/-	29/6	

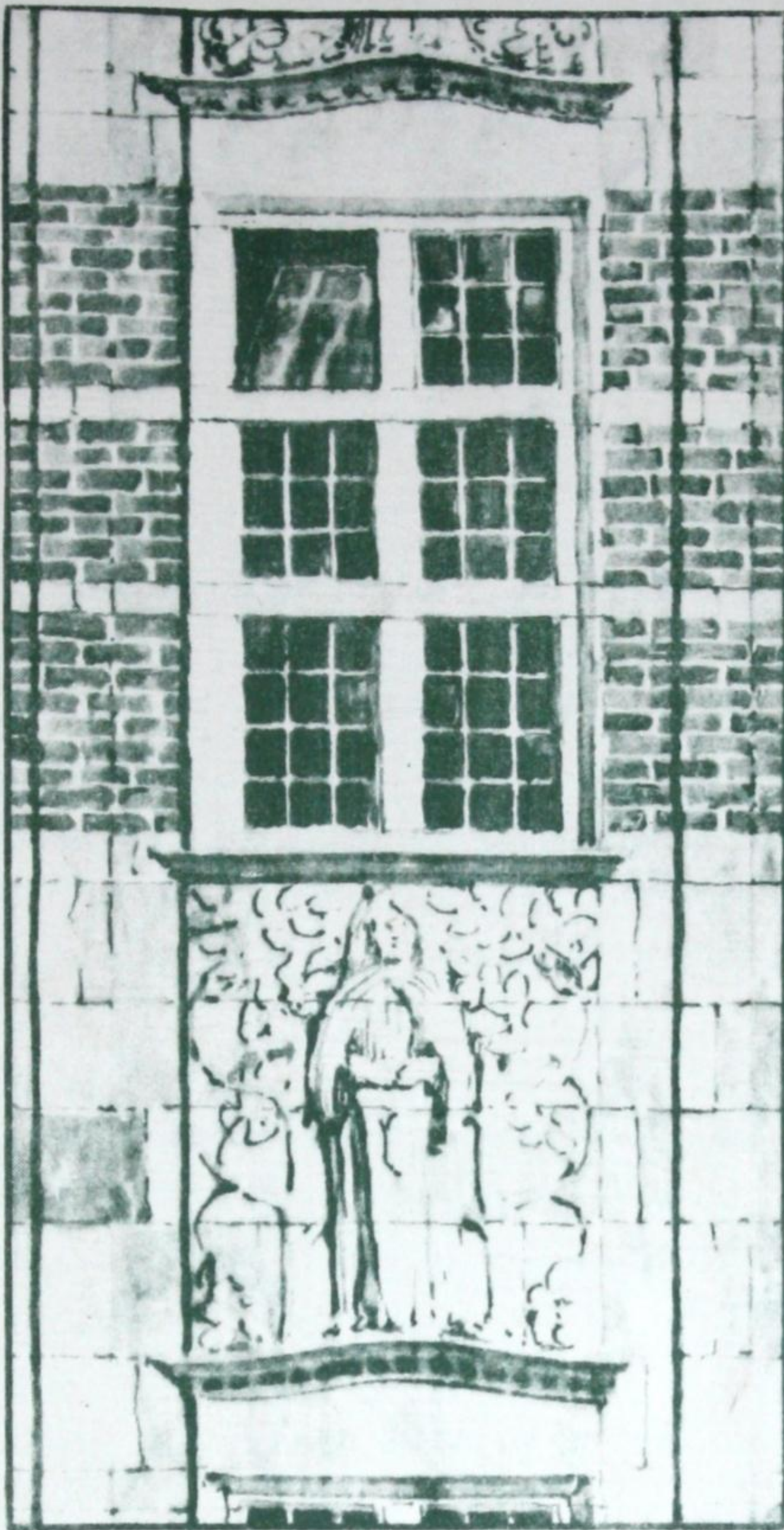
SECTION No 10.				
Casements and Frames hung at cill, to fall inwards.				
Height.	Width.	Quality 1.	Quality 2.	
2ft. and under - - -	2ft. and under	23/-	20/6	
Above 2ft. and under 3ft. -	„ „	24/-	21/6	
3ft. and up to 3ft. 6in. -	„ „	26/6	24/-	
Above 3ft. 6in. and up to 4ft. -	„ „	30/-	27/6	

The prices of each section illustrated in this Catalogue are grouped together on pages 32 & 33, so that easy comparison can at once be made. For complete list of EXTRAS, see page 34. For designs of FITTINGS, see pages 37 to 47.

The above sections are made in BRONZE, prices on application.

GEORGE

Wardry metal
works Salford
Manchester



WRAGGE

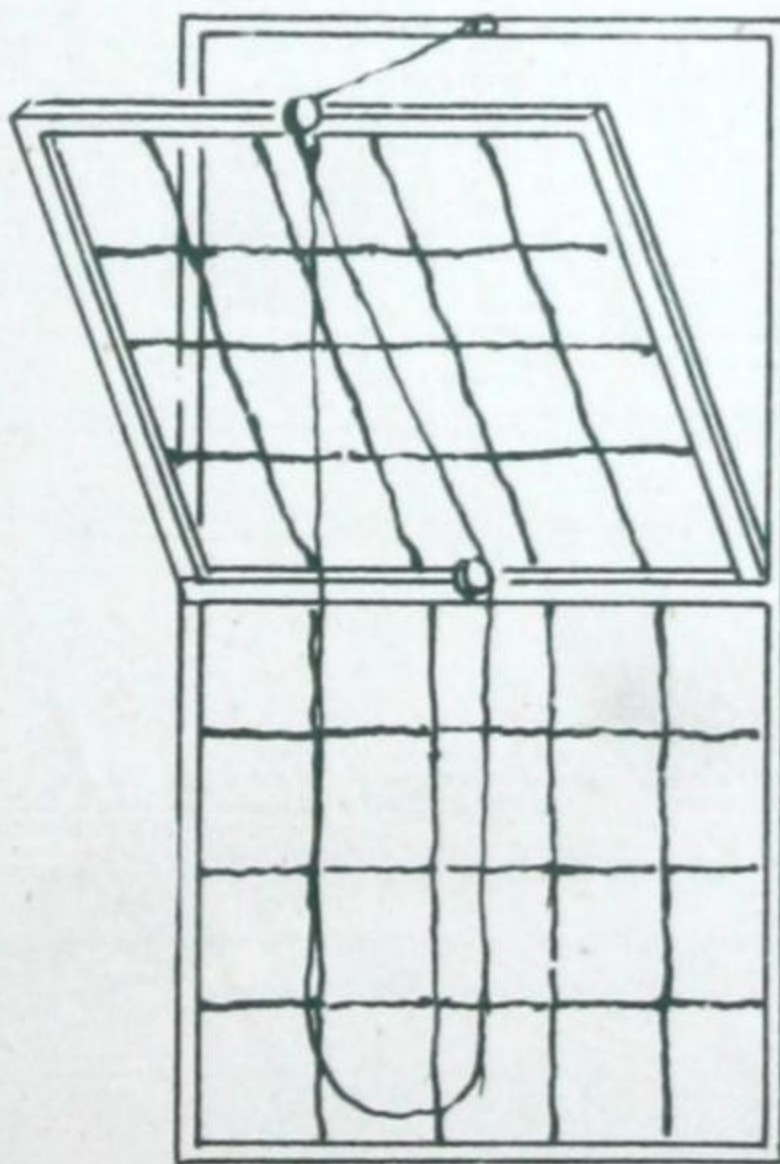
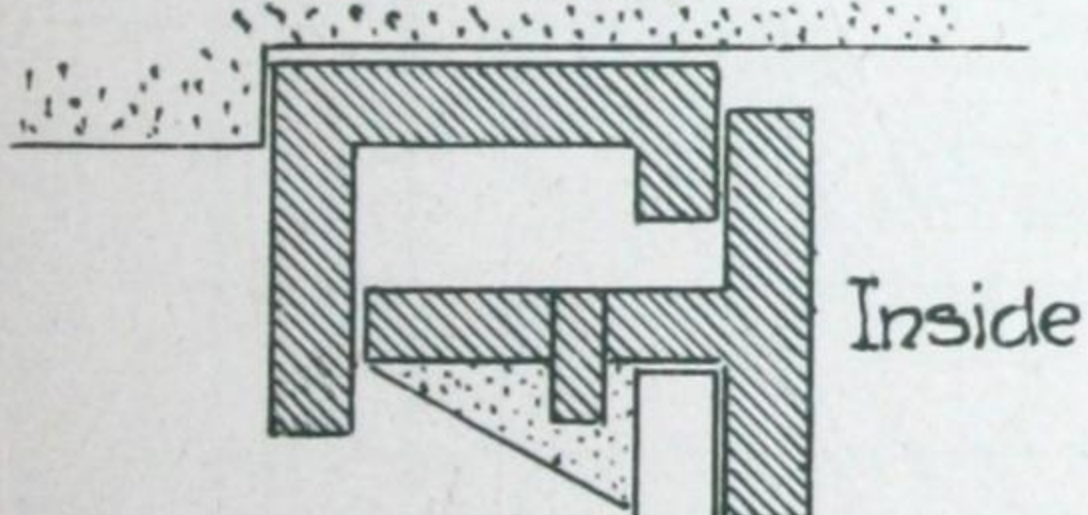
22 Surrey St
Strand
London W.C.

Section No 9
for transoms
lights only ©

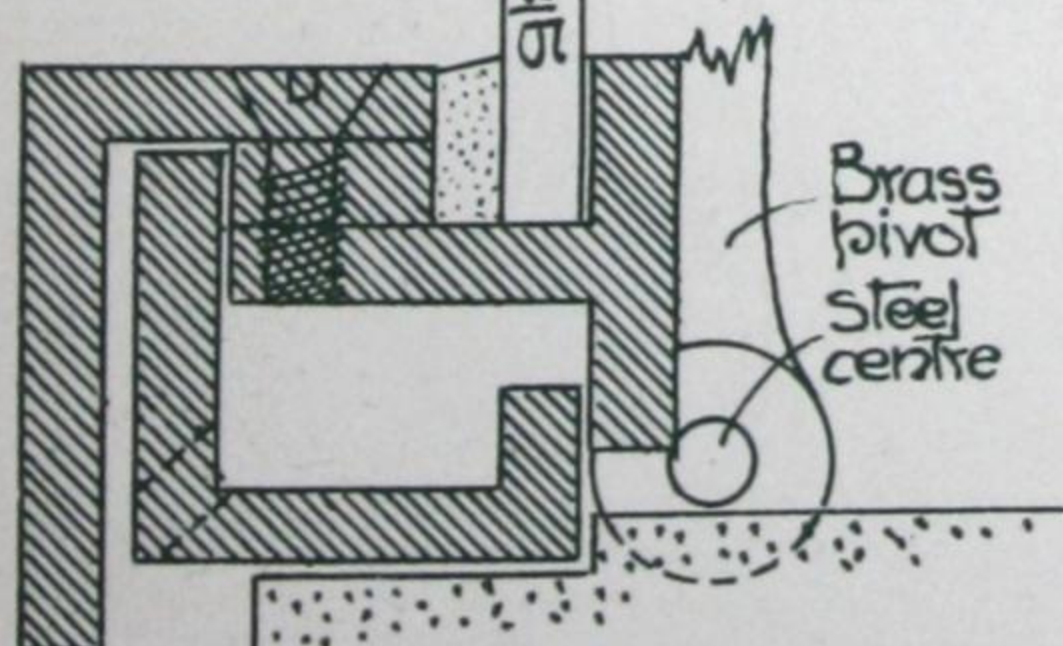
To pivot at Cill
and fall back

Full size ©

Section
thru Head



Inside
Elevation



Section
thru Cill

Note: Same depth of
rebate at sides as
shewn at head

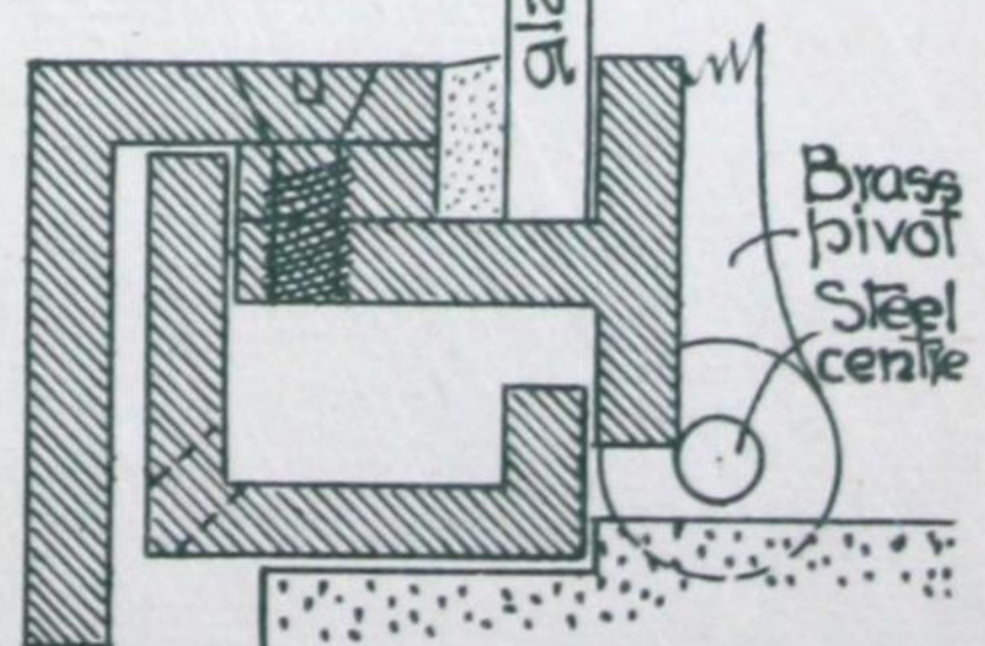
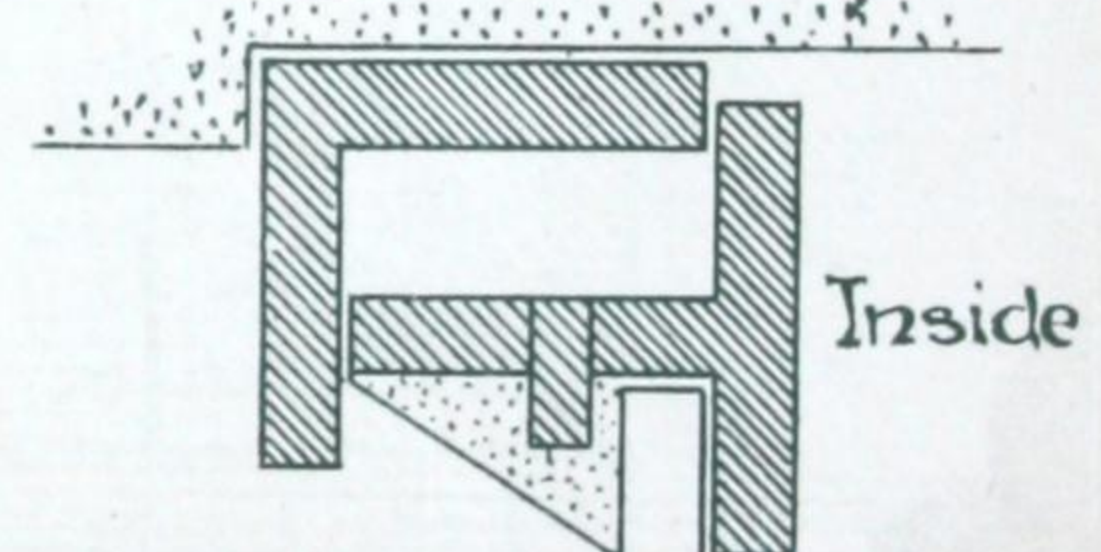
Note: These sections
can be prepared to
suit any details

Section No 10
for transoms
lights only ©

To pivot at Cill
and fall back

Full Size :

Section.
thru Head



Section
thru Cill

GEORGE WRAGGE,

WARDRY METAL WORKS, SALFORD, MANCHESTER.

CASEMENTS AND FRAMES of Nos. 11, 12, and 12a SECTIONS (see opposite page), in wrought iron, to swing on centres. No. 12 section is guaranteed weather-tight. Nos. 11 and 12a are weather-tight under ordinary conditions.

SPECIFICATION to which the price lists below are subject.

Casements prepared to receive glass in one square, and with square heads. All corners to be rivetted and brazed, hung on coinage metal turned centres, and fitted with eyes at top, and pulleys and eyes at bottom, to open and close by cords.

NOTE. Special quotations will be given for rod or other gearing (see page 50).

Section No. 12a.			Section No. 11			Section No. 12.		
Casements & Frames to pivot on centres.			To pivot on centres.			Casements & Frames to pivot on centres.		
Height.	Width.		Same heights as Section 12a.	Same widths as Section 12a.		Height.	Width.	
2ft. and under	2ft. & under	15/-			20/-	2ft. and under	2ft. & under	23/-
2ft. & under 2ft. 6	„ „	16/-			21/-	2ft. & under 2ft. 6	„ „	24/-
* 2ft. 6 & under 3ft.	„ „	17/6			23/6	2ft. 6 & under 3ft.	„ „	25/6
* 3ft. and up to 4ft.	„ „	19/-			25/-			
Circular Casements.			Circular Casements.			Circular Casements.		
Diameter. Section No. 12a.			Diameter. Section No. 11.			Diameter. Section No. 12.		
2ft. and under - - 19/-			2ft. and under - - 25/-			2ft. and under - - 28/-		
Abv. 2ft. & under 2ft. 6 20/-			Abv. 2ft. & under 2ft. 6 26/-			Abv. 2ft. & under 2ft. 6 28/6		
2ft. 6 and under 3ft - 22/6			2ft. 6 and under 3ft. - 30/-			2ft. 6 and under 3ft. - 31/6		

*Heavier Section.

The prices of each section illustrated in this Catalogue are grouped together on pages 32 & 33, so that easy comparison can at once be made. For complete list of EXTRAS, see page 34. For designs of FITTINGS, see pages 37 to 47.

The above sections are made in BRONZE, prices on application.

Wardry metal
works Salford
Manchester

GEORGE WRAGGE

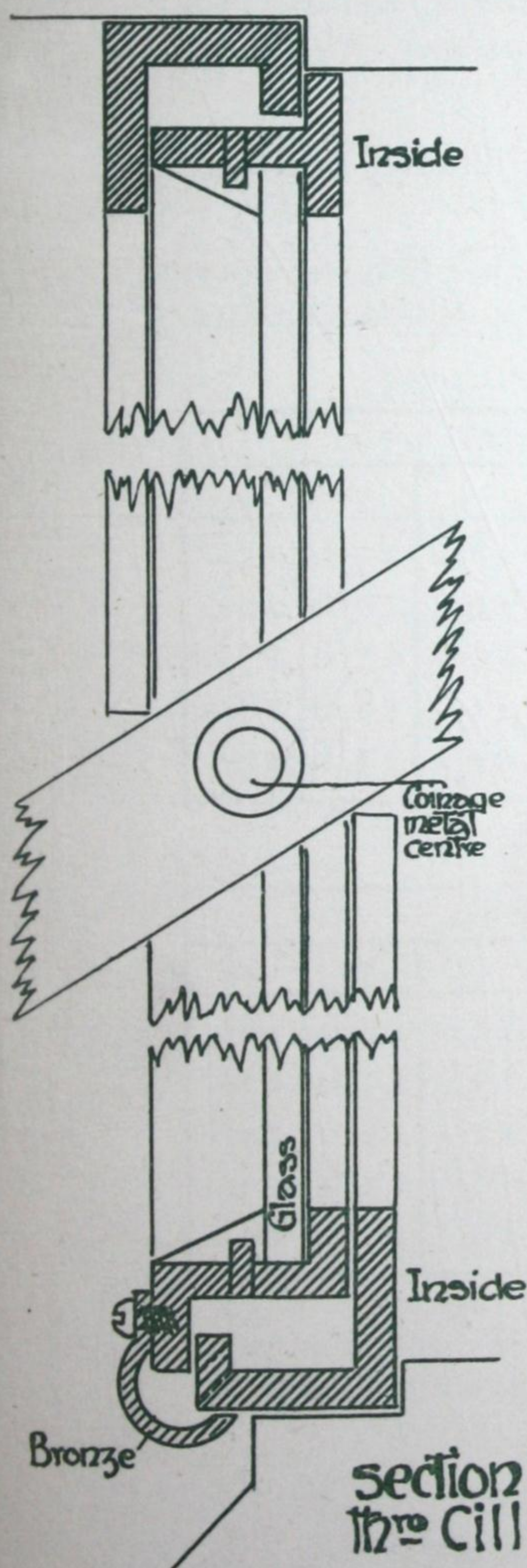
22 Surrey St
Strand
London W.C

Section No 12

To pivot
on centres

Full size
details :

Section
thro head

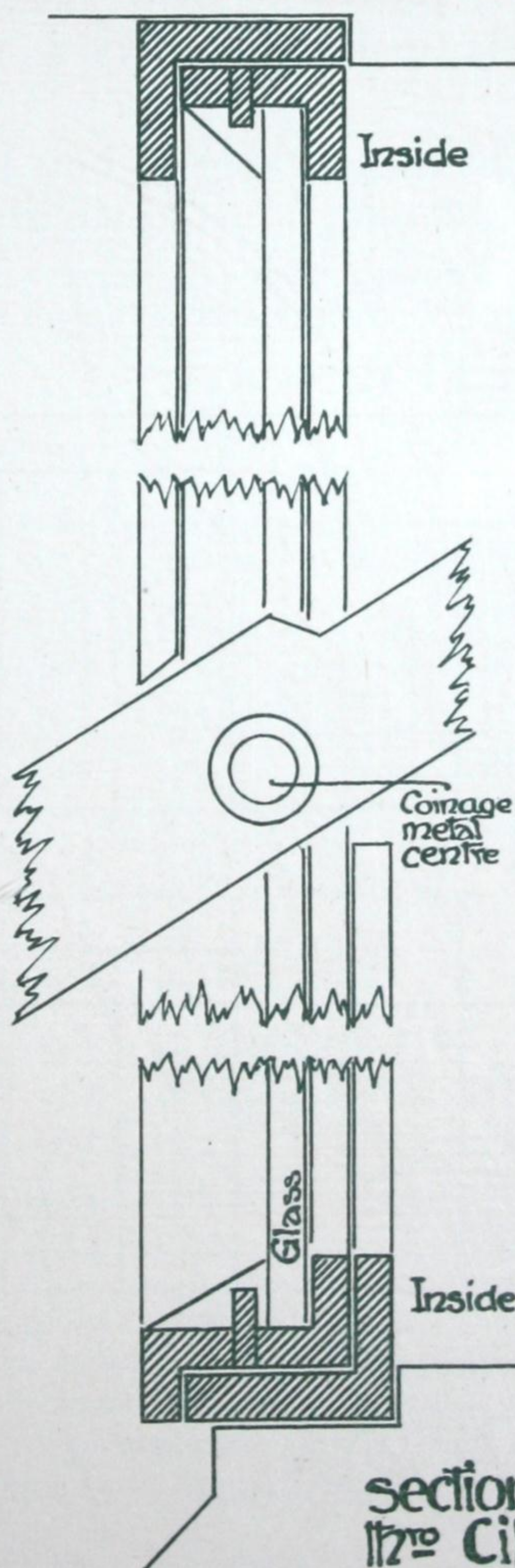


Section No 11

To pivot
on centres

Full size
details

Section
thro head

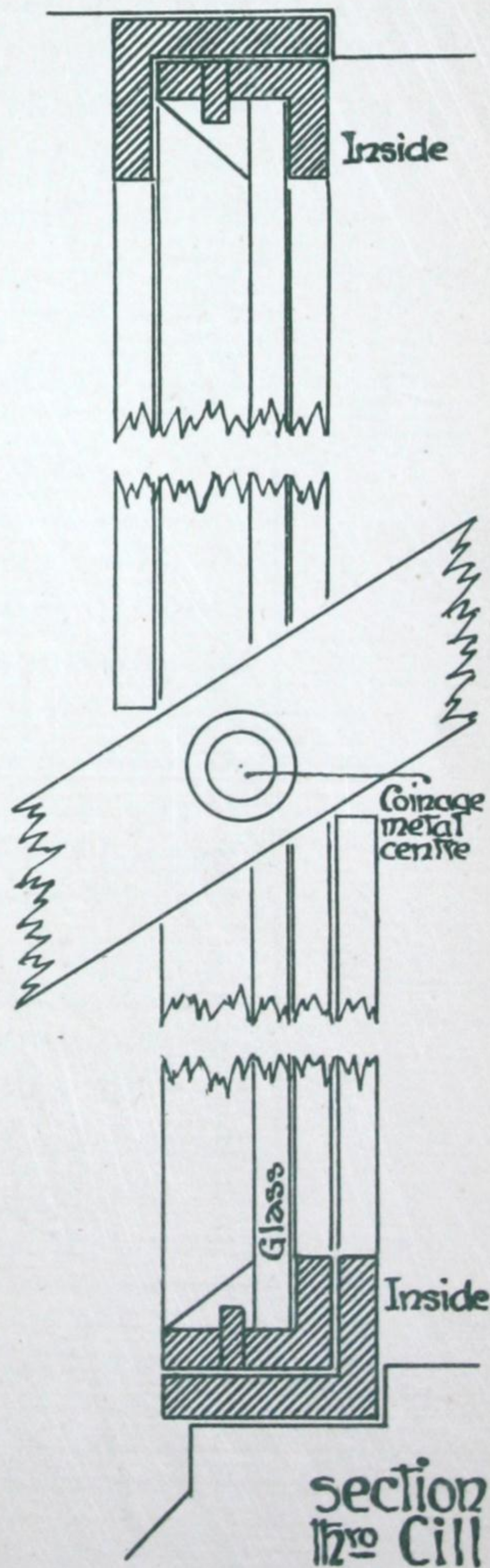


Section No 12^a

To pivot
on centres

Full size
details

Section
thro head



NOTE: The same depth of rebate is required
at the sides as shown at head and cill

These casements can be
made to suit any details

GEORGE WRAGGE, WARDRY METAL WORKS, SALFORD, MANCHESTER.

CASEMENTS of Nos. 26, 27, 28, 29, 30 & 31 SECTIONS (see opposite page). Sections 26 & 27 in steel, remainder in wrought iron. Sections 26, 28 & 29 (with loose slips) if properly fixed are weather tight under ordinary conditions, and make very satisfactory casements.

SPECIFICATION to which the price list below is subject.

Casements to have square heads & prepared to receive glass in one square. All corners rivetted and brazed.

No. 2 QUALITY, to be fitted with solid brass butt hinges, handle No. 84 (see page 37), and stay with two pins No. 92 (see page 47), in coinage metal, plainly filed.

No. 3 QUALITY, to be fitted with iron butt hinges, handle, and stay with two pins, of good design, in malleable iron.

NOTE. Any other fittings illustrated in this Catalogue can be adopted in preference to the above at *pro rata* prices if desired, or special designs and prices will be submitted.

SECOND QUALITY.

Height.	Width.	SECTIONS.					
		26	27	28	29	30	31
2ft. and under	2ft. & under	20/-	17/-	18/6	18/-	15/6	15/-
Abv. 2ft. and under 3ft.	„ „	21/-	18/-	19/6	19/-	16/6	16/-
3ft. and under 3ft. 6in.	„ „	22/-	19/-	20/6	20/-	17/6	17/-
3ft. 6in. and under 4ft.	„ „	23/-	20/-	21/6	21/-	18/6	18/-
4ft. and up to 4ft. 6in.	„ „	24/-	21/-	22/6	22/-	19/6	19/-

THIRD QUALITY.

Height.	Width.	SECTIONS.					
		26	27	28	29	30	31
2ft. and under	2ft. & under	17/-	14/-	15/6	15/-	12/6	12/-
Abv. 2ft. and under 3ft.	„ „	18/-	15/-	16/6	16/-	13/6	13/-
3ft. and under 3ft. 6in.	„ „	19/-	16/-	17/6	17/-	14/6	14/-
3ft. 6in. and under 4ft.	„ „	20/-	17/-	18/6	18/-	15/6	15/-
4ft. and up to 4ft. 6in.	„ „	21/-	18/-	19/6	19/-	16/6	16/-

NOTE. For prices of hopper and sliding casements, etc., etc., see page 48.

The prices of each section illustrated in this Catalogue are grouped together on pages 32 and 33, so that easy comparison can at once be made. For complete list of EXTRAS see page 34. For designs of FITTINGS, see pages 37 to 47.

The above sections are made in BRONZE, prices on application.

Wardry metal
works Salford
Manchester

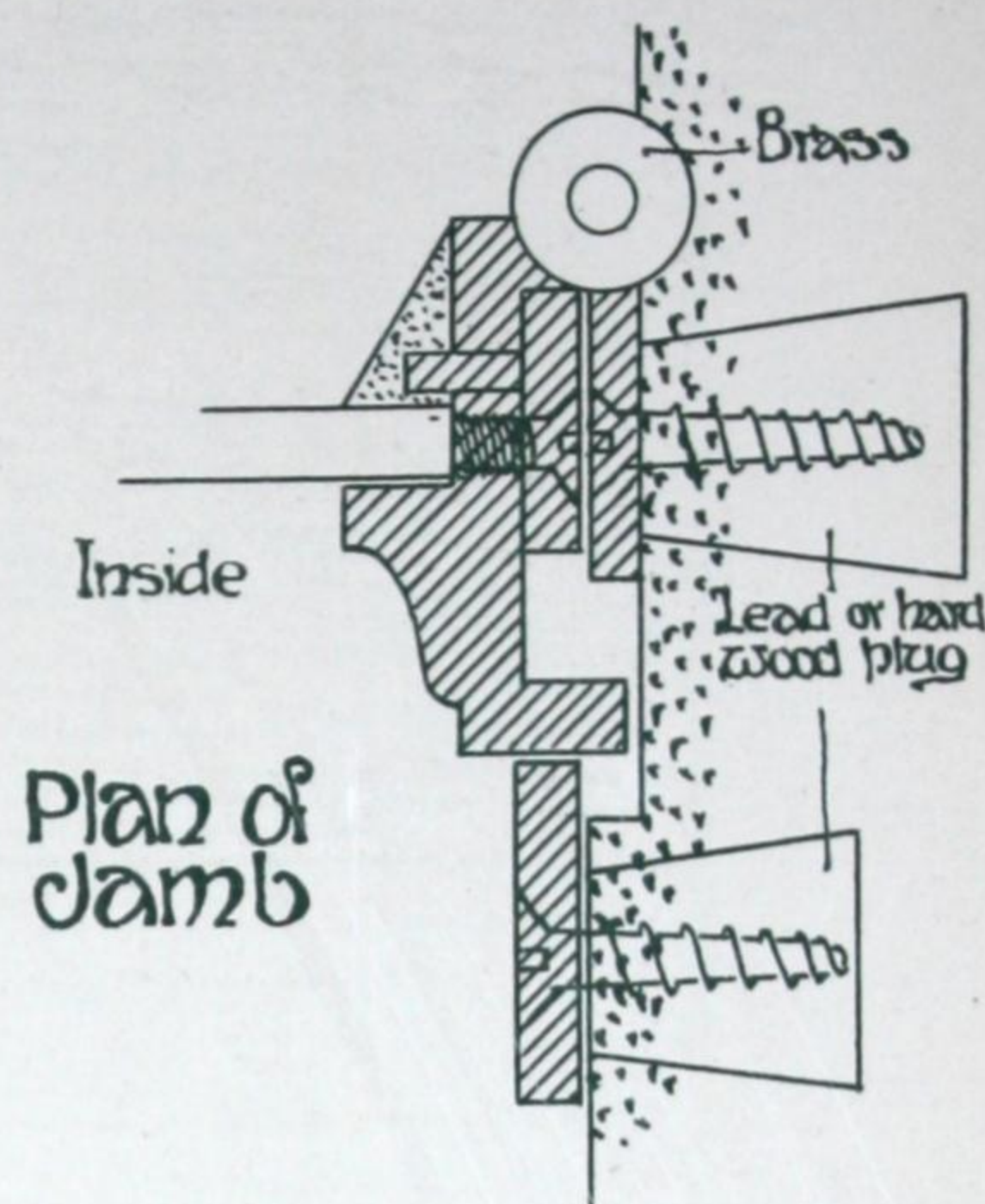
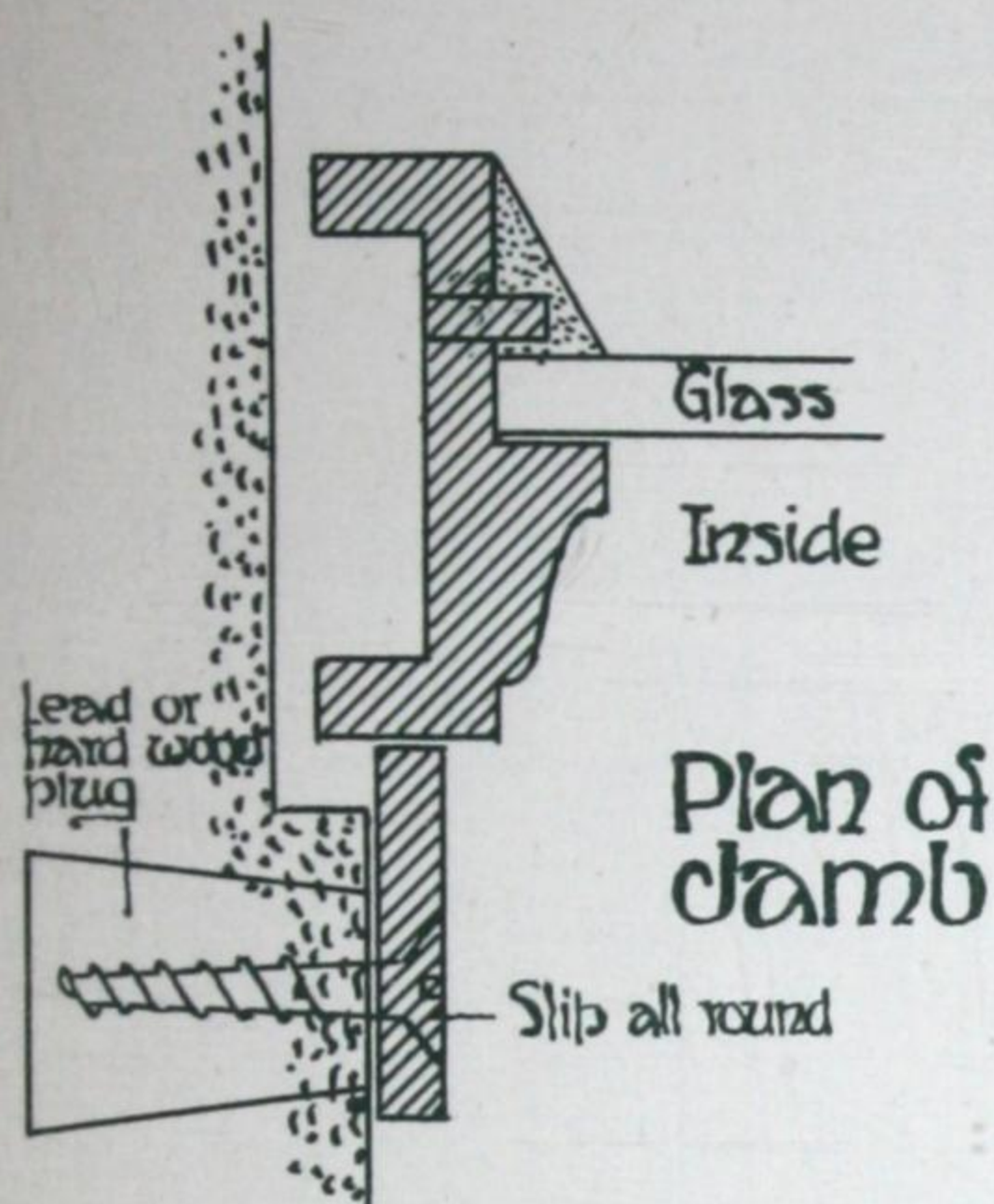
GEORGE WRAGGE

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London W.C

Section N°26

Full size
details
to hinge
at side
to open
outwards

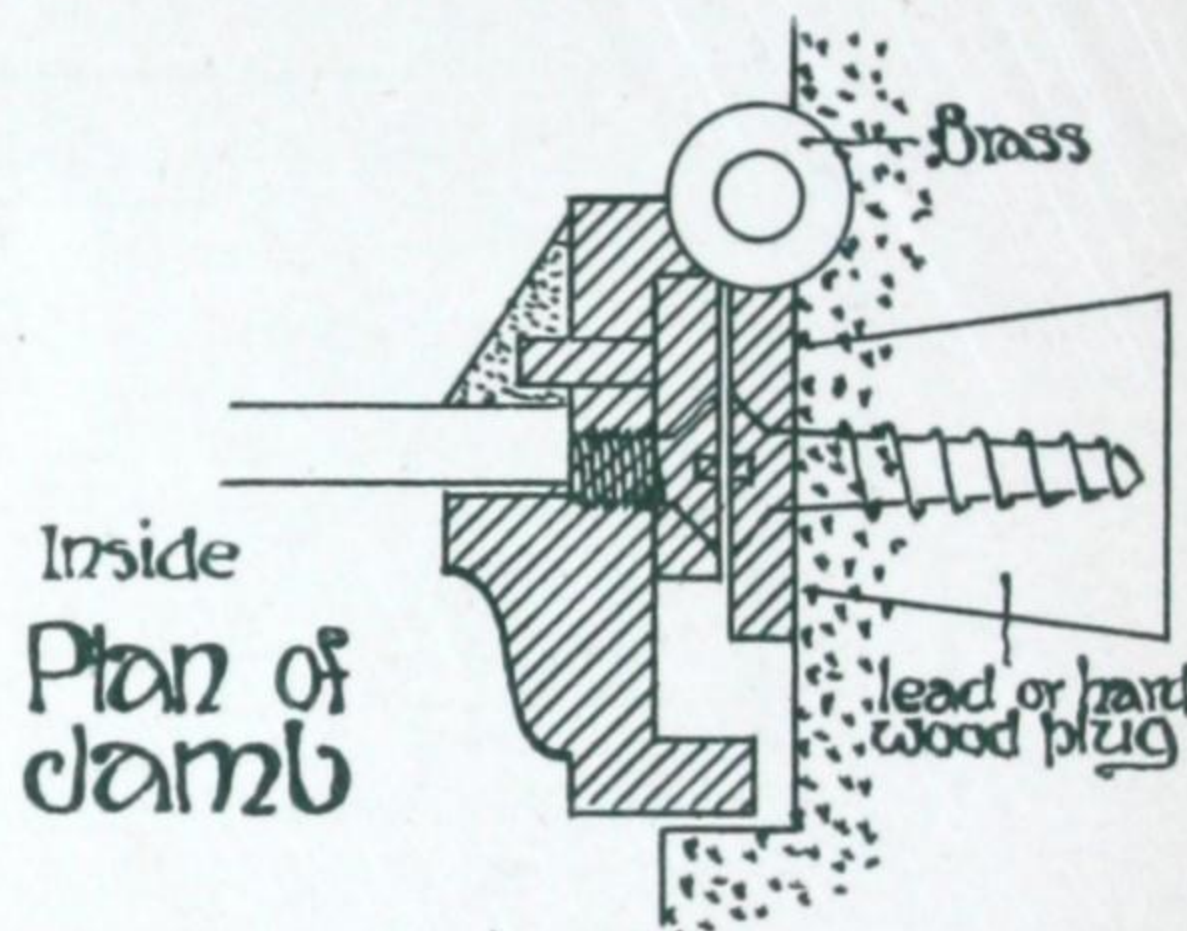
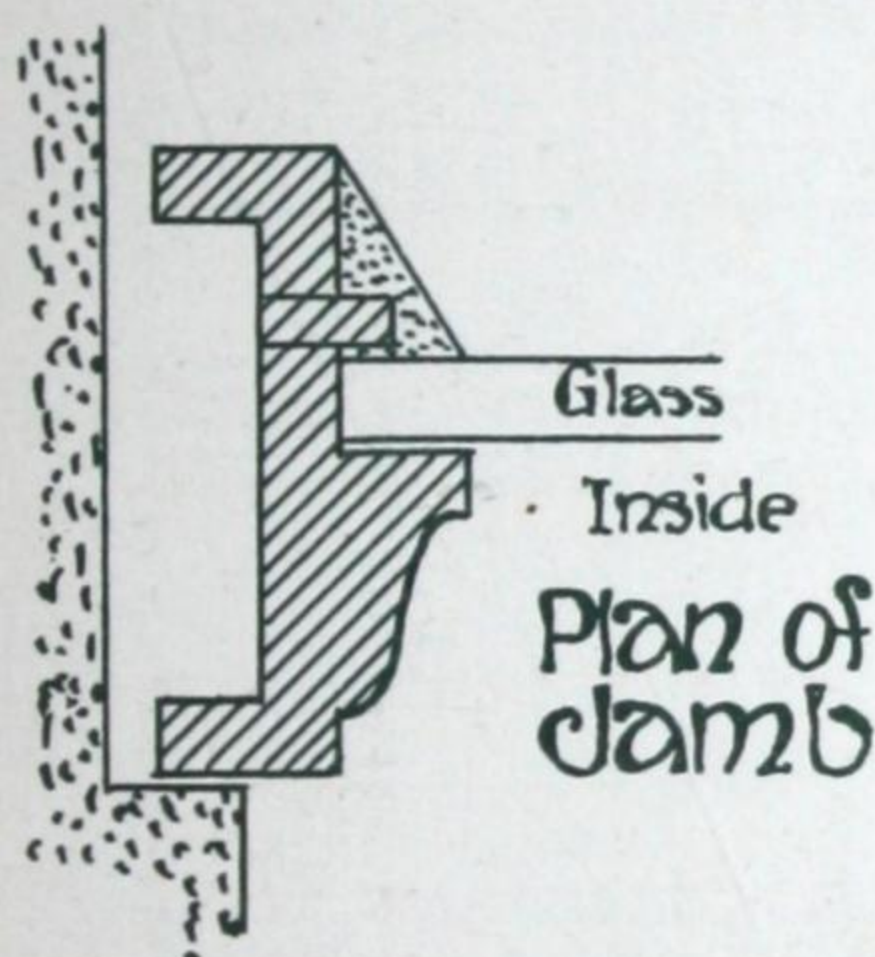
Same rebate at
head & sill: latter
weathered



Section N°27

Full size
details
to hinge
at side
to open
outwards

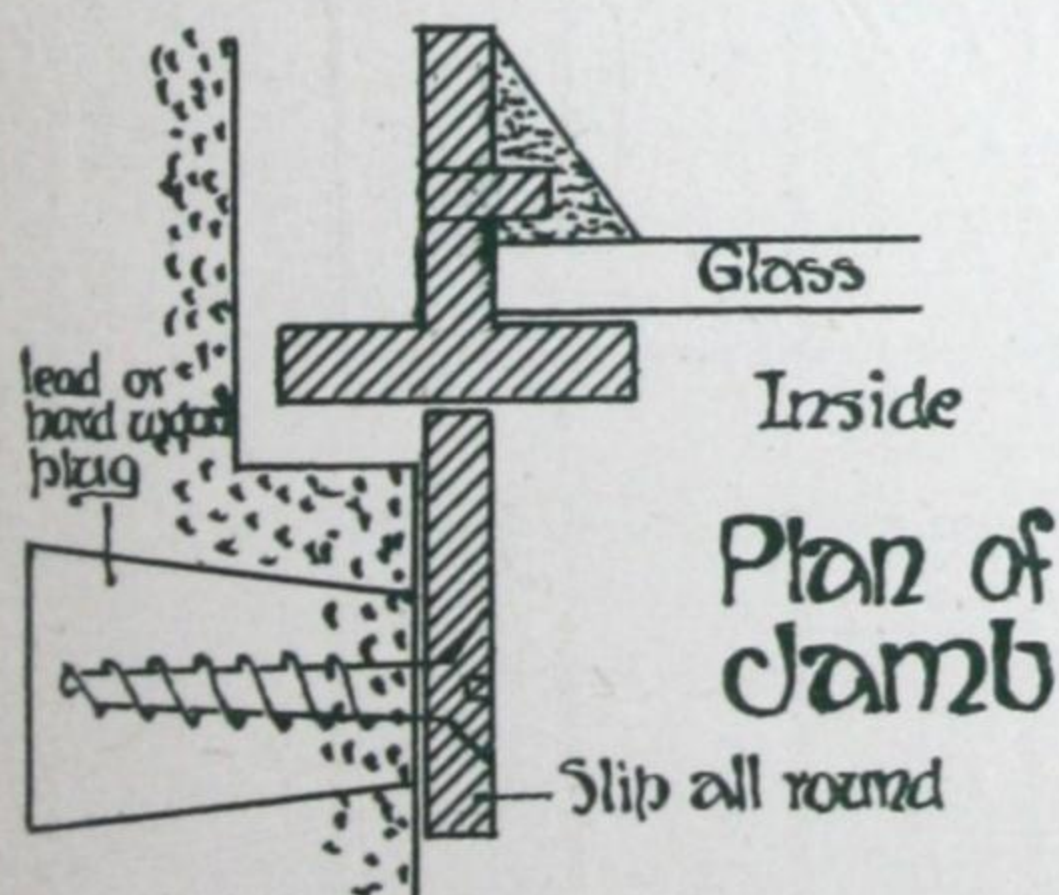
Same rebate at
head & sill: latter
weathered



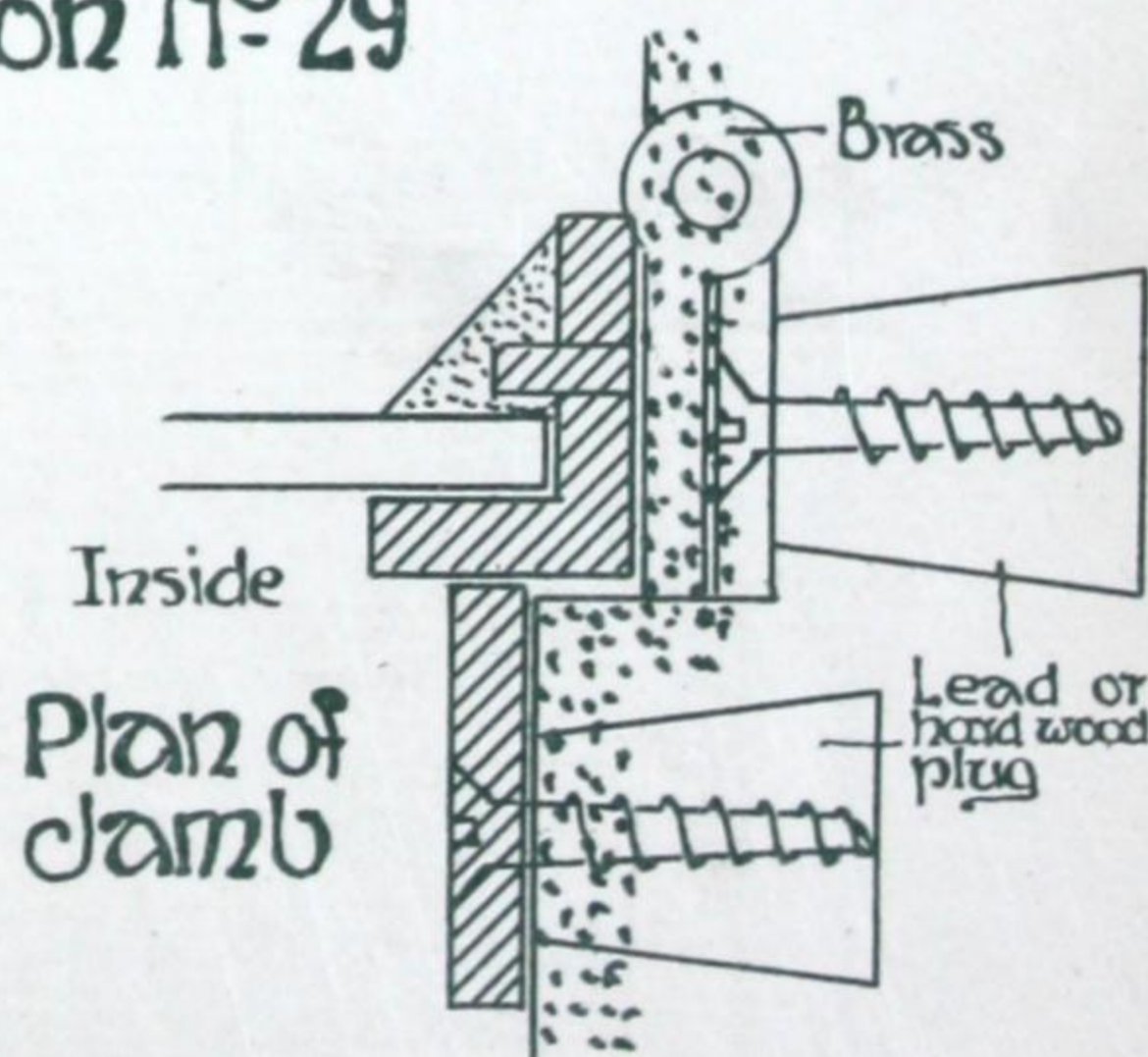
Section N°28

Full size
details
to hinge
at side
to open
outwards

Same rebate at
head & sill: latter
weathered

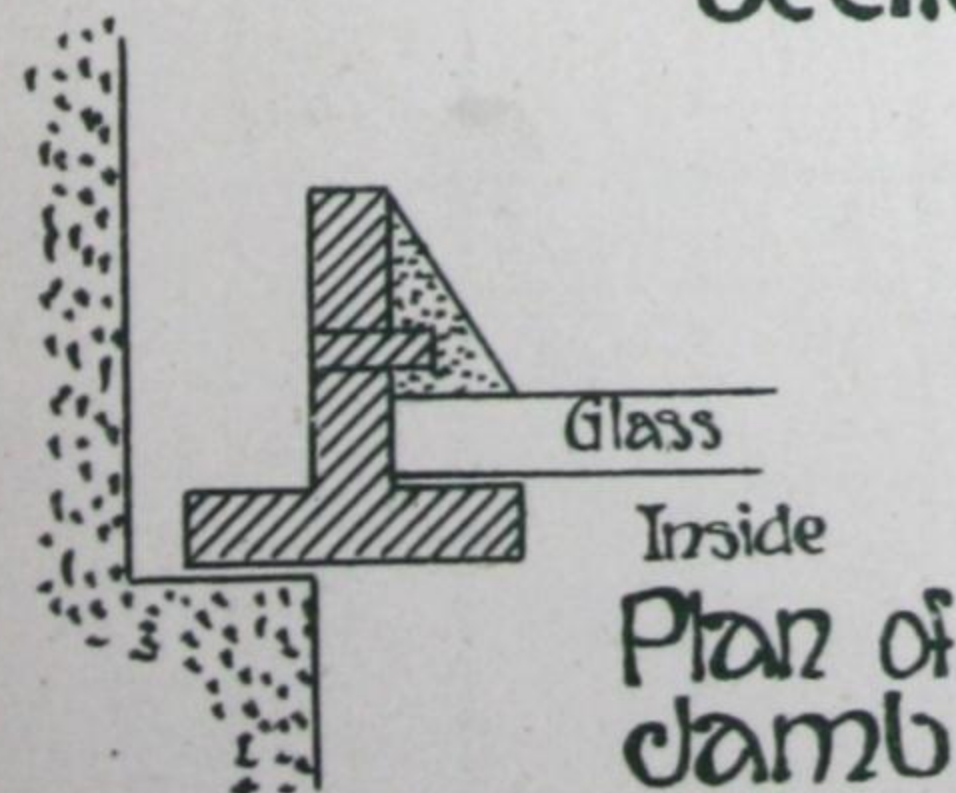


Section N°29

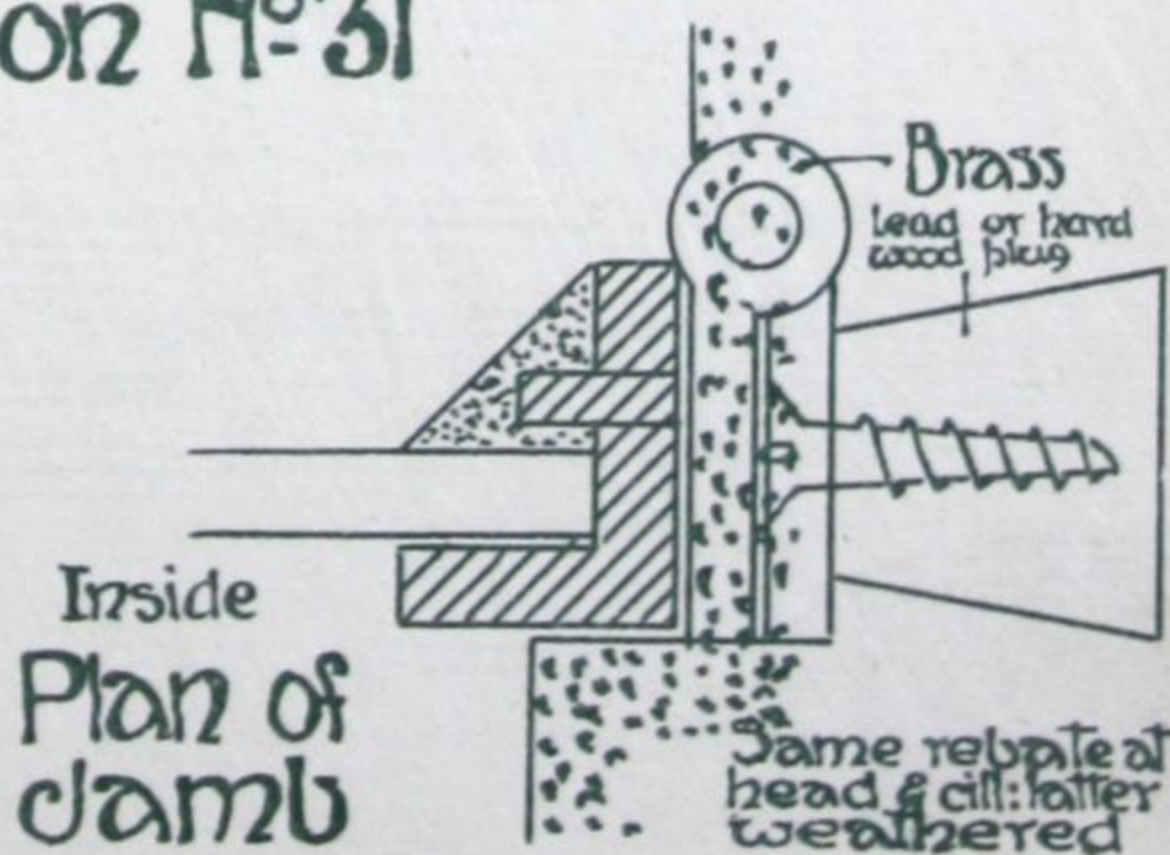


Section N°30

Full size
details
to hinge
at side
to open
outwards



Section N°31



GEORGE WRAGGE,

WARDRY METAL WORKS, SALFORD, MANCHESTER.

The tables below give the prices of the whole of the casements illustrated in this Catalogue, so that a comparison can easily be arrived at, & opposite each illustration a complete specification of the fittings, etc., is given.

SIDE HUNG CASEMENTS. FIRST QUALITY.

HEIGHT.	WIDTH.	No. 19	No. 20	Inwards No. 21	No. 4	No. 5	Inwards No. 8
2ft. and under - -	2ft. and under	32/6	38/6	43/6	Not priced in this quality.	Not priced in this quality.	Not priced in this quality.
Above 2ft. and under 3ft. -	" "	33/6	39/6	44/6			
3ft. and under 3ft. 6in. -	" "	35/-	41/-	46/-			
3ft. 6in. and under 4ft. -	" "	37/6	43/6	48/6			
4ft. and under 4ft. 6in. -	" "	38/6	44/6	67/6			
4ft. 6in. to 5ft. -	" "	55/-	62/6	70/-			
Above 5ft. and up to 6ft. -	" "	...	72/6	77/6			
HEIGHT.	WIDTH.	No. 26	No. 27	No. 28	No. 29	No. 30	No. 31
2ft. and under - -	2ft. and under	Not priced in this quality.	Not priced in this quality.	Not priced in this quality.	Not priced in this quality.	Not priced in this quality.	Not priced in this quality.
Above 2ft. and under 3ft. -	" "						
3ft. and under 3ft. 6in. -	" "						
3ft. 6in. and under 4ft. -	" "						
4ft. and under 4ft. 6in. -	" "						
4ft. 6in. to 5ft. -	" "						
Above 5ft. and up to 6ft. -	" "						

SECOND QUALITY.

HEIGHT.	WIDTH.	No. 19	No. 20	Inwards No. 21	No. 4	No. 5	Inwards No. 8
2ft. and under - -	2ft. and under	29/-	35/-	40/-	29/-	26/-	27/6
Above 2ft. and under 3ft. -	" "	30/-	36/-	41/-	30/-	27/-	28/6
3ft. and under 3ft. 6in. -	" "	31/6	37/6	42/6	31/-	28/-	29/6
3ft. 6in. and under 4ft. -	" "	34/-	40/-	45/-	32/6	30/-	31/6
4ft. and under 4ft. 6in. -	" "	35/-	41/-	62/6	34/6	31/6	33/-
4ft. 6in. to 5ft. -	" "	50/-	57/6	65/-	43/6	...	...
Above 5ft. and up to 6ft. -	" "	...	67/6	72/6	...	...	...
HEIGHT.	WIDTH.	No. 26	No. 27	No. 28	No. 29	No. 30	No. 31
2ft. and under - -	2ft. and under	20/-	17/-	18/6	18/-	15/6	15/-
Above 2ft. and under 3ft. -	" "	21/-	18/-	19/6	19/-	16/6	16/-
3ft. and under 3ft. 6in. -	" "	22/-	19/-	20/6	20/-	17/6	17/-
3ft. 6in. and under 4ft. -	" "	23/-	20/-	21/6	21/-	18/6	18/-
4ft. and under 4ft. 6in. -	" "	24/-	21/-	22/6	22/-	19/6	19/-
4ft. 6in. to 5ft. -	" "	...	...	...	...	...	...
Above 5ft. and up to 6ft. -	" "	...	...	...	...	...	...

THIRD QUALITY.

HEIGHT.	WIDTH.	No. 19	No. 20	Inwards No. 21	No. 4	No. 5	Inwards No. 8
2ft. and under - -	2ft. and under	28/-	34/-	39/-	28/-	25/-	26/6
Above 2ft. and under 3ft. -	" "	29/-	35/-	40/-	29/-	26/-	27/6
3ft. and under 3ft. 6in. -	" "	30/6	36/6	41/6	30/-	27/-	28/6
3ft. 6in. and under 4ft. -	" "	33/-	39/-	44/-	31/6	29/-	30/6
4ft. and under 4ft. 6in. -	" "	34/-	40/-	60/-	33/6	30/6	32/-
4ft. 6in. to 5ft. -	" "	47/6	55/-	62/6	40/-	...	...
Above 5ft. and up to 6ft. -	" "	...	65/-	70/-	...	...	...
HEIGHT.	WIDTH.	No. 26	No. 27	No. 28	No. 29	No. 30	No. 31
2ft. and under - -	2ft. and under	17/-	14/-	15/6	15/-	12/6	12/-
Above 2ft. and under 3ft. -	" "	18/-	15/-	16/6	16/-	13/6	13/-
3ft. and under 3ft. 6in. -	" "	19/-	16/-	17/6	17/-	14/6	14/-
3ft. 6in. and under 4ft. -	" "	20/-	17/-	18/6	18/-	15/6	15/-
4ft. and under 4ft. 6in. -	" "	21/-	18/-	19/6	19/-	16/6	16/-
4ft. 6in. to 5ft. -	" "	...	...	...	...	...	...
Above 5ft. and up to 6ft. -	" "	...	...	...	...	...	...

For complete list of extras, see page 34. For designs of fittings, see pages 37 to 47. For prices of hopper, sliding casements, etc., see page 48.

GEORGE WRAGGE,

WARDRY METAL WORKS, SALFORD, MANCHESTER.

TOP HUNG CASEMENTS, to push out. FIRST QUALITY.

HEIGHT.	WIDTH.	No. 19.	No. 20.	No. 4.	No. 5.
2ft. and under - - -	2ft. and under	25/-	31/-	Not	Not
Above 2ft. and under 2ft. 6in. -	" "	25/6	31/6	priced	priced
2ft. 6in. and under 3ft. - -	" "	26/-	32/-	in this	in this
3ft. and up to 3ft. 6in. - -	" "	30/-	36/-	quality.	quality.

SECOND QUALITY.

HEIGHT.	WIDTH.	No. 19.	No. 20.	No. 4.	No. 5.
2ft. and under - - -	2ft. and under	24/-	30/-	25/6	23/6
Above 2ft. and under 2ft. 6in. -	" "	24/6	30/6	26/-	24/-
2ft. 6in. and under 3ft. - -	" "	25/-	31/-	27/-	25/-
3ft. and up to 3ft. 6in. - -	" "	29/-	35/-	28/6	26/6

THIRD QUALITY.

HEIGHT.	WIDTH.	No. 19.	No. 20.	No. 4.	No. 5.
2ft. and under - - -	2ft. and under	23/6	29/6	25/-	23/-
Above 2ft. and under 2ft. 6in. -	" "	24/-	30/-	25/6	23/6
2ft. 6in. and under 3ft. - -	" "	24/6	30/6	26/6	24/6
3ft. and up to 3ft. 6in. - -	" "	28/6	34/6	28/-	26/-

BOTTOM HUNG CASEMENTS, to fall back. FIRST QUALITY.

HEIGHT.	WIDTH.	No. 23.	No. 9.	No. 10.
2ft. and under - - -	2ft. and under	37/6	25/-	23/-
Above 2ft. and under 3ft. -	" "	41/6	26/-	24/-
3ft. and up to 3ft. 6in. - -	" "	45/-	28/6	26/6
Above 3ft. 6in. and up to 4ft. -	" "	48/6	32/-	30/-

SECOND QUALITY.

HEIGHT.	WIDTH.	No. 23.	No. 9.	No. 10.
2ft. and under - - -	2ft. and under	33/-	22/6	20/6
Above 2ft. and under 3ft. -	" "	37/-	23/6	21/6
3ft. and up to 3ft. 6in. - -	" "	40/6	26/-	24/-
Above 3ft. 6in. and up to 4ft. -	" "	44/-	29/6	27/6

CENTRE HUNG CASEMENTS.

HEIGHT.	WIDTH.	No. 22.	No. 11.	No. 12.	No. 12a.
2ft. and under - - -	2ft. and under	36/6	20/-	23/-	15/-
2ft. and under 2ft. 6in. - -	" "	37/6	21/-	24/-	16/-
2ft. 6in. and under 3ft. - -	" "	38/6	23/6	25/6	17/6
3ft. and up to 4ft. - -	" "	42/6	25/-	...	19/-

For complete list of extras, see page 34. For designs of fittings, see pages 37 to 47. For prices of hopper, sliding casements, etc., see page 48.

GEORGE WRAGGE,

WARDRY METAL WORKS, SALFORD, MANCHESTER.

EXTRAS.

SHAPED HEADS AND CURVED ON PLAN.

Casements & Frames, and Fixed Lights of two frames.			Fixed Lights of one frame.			
			Giving same plane of glass and sight line as casement.		Angle Iron.	
Sections.	Semi or Gothic, or Circular on plan.	Trefoil.	Semi or Gothic, or Circular on plan.	Trefoil.	Semi or Gothic, or Circular on plan.	Trefoil.
Nos.						
19, 20, 21, 22, 23	10/-	15/-	5/-	8/-	3/-	6/-
24 double - -	20/-	30/-	10/-	16/-	5/-	8/-
4 - - - -	8/6	13/6	4/6	7/-	3/-	6/-
5, 8, 9, 10, 11, 12, 12a - - -	6/6	10/-	4/-	6/-	3/-	6/-
26, 28, 29 - -	4/-	6/-	...	...	3/-	6/-
27, 30, 31 - -	3/6	5/6	...	...	3/-	6/-

Glazing in panes, 9d. per pane. Glazing Bars (single) 1/- each.
 Saddle Bars (for leaded glazing), Iron 6d. each, Bronze, 1/- each.
 Fillets for grooved details, 3d. per lin. foot.
 Plain Lead Cills, prepared for fixing under casements, 1/6 per lin. foot.
 Ditto, with condensation gutter for fixed glazing (where metal frames are not used), 1/9 per lin. foot.
 Coinage Metal Spring Catches, with hook to work by long arm, 2/- each.
 Ditto, with pulley to work by cords, 2/6 each.
 Special quotation will be given for various forms of gearing, see page 50.
 For designs of fittings see pages 37 to 47.

CASEMENT FITTINGS.

These fittings can be made to suit any details for Wood Casements; comparison in design, quality of finish, and price, is invited.

All fittings, of whatever material, are made at my own works, which greatly facilitates the carrying out of special designs (which designs will be reserved when desired).

All parts of our fittings are made to gauge, and are so fitted to our metal casements that broken parts can be replaced without unglazing, and without the assistance of skilled labor.

Our coinage or bronze metal is of a special mixture, and with age takes a beautiful tone, but this can be at once attained by a process, which treatment is permanent and is covered by the prices given for best finished work.

GEORGE WRAGGE,

WARDRY METAL WORKS, SALFORD, MANCHESTER.

Handles and Plates (see opposite page) prepared for Metal Casements; they can be adapted to suit any detail of Wood Casements at prices as below.

No. 1, malleable iron, bronzed or dull blacked, fitted up with coinage metal working parts.

No. 2, hammered iron, finished dull bright.

No. 3, coinage metal, plainly filed.

No. 4, coinage metal, polished and toned, or bronzed.

CASEMENT HANDLES & PLATES.				
Nos.	Malleable Iron, bronzed or painted.	Hammered Iron.	Coinage Metal, plainly filed.	Coinage Metal, polished, toned, or bronzed.
83	2/6	7/6	4/-	5/-
84	1/6	5/-	2/9	3/3
85	2/-	8/6	4/-	5/-
86	2/6	7/6	4/6	5/6
87	2/-	5/6	4/-	5/-
88	1/6	5/6	2/9	3/3
89	1/6	5/-	2/9	3/3

Cheaper Iron Handles than those priced above can be used of ordinary stock patterns, but they are lighter and have all working parts in iron; they are not recommended.

The above fittings can be made in silver, aluminium, brass, &c., &c. In ordering, the "hands" should be stated, and details of the woodwork given full size, both casement and frame.

Nos. 83 and 84 illustrate a right and left hand respectively.

Special designs will be submitted or quoted for, or architects' own designs will be carried out and reserved if desired.

Wardry metal
works Salford
Manchester

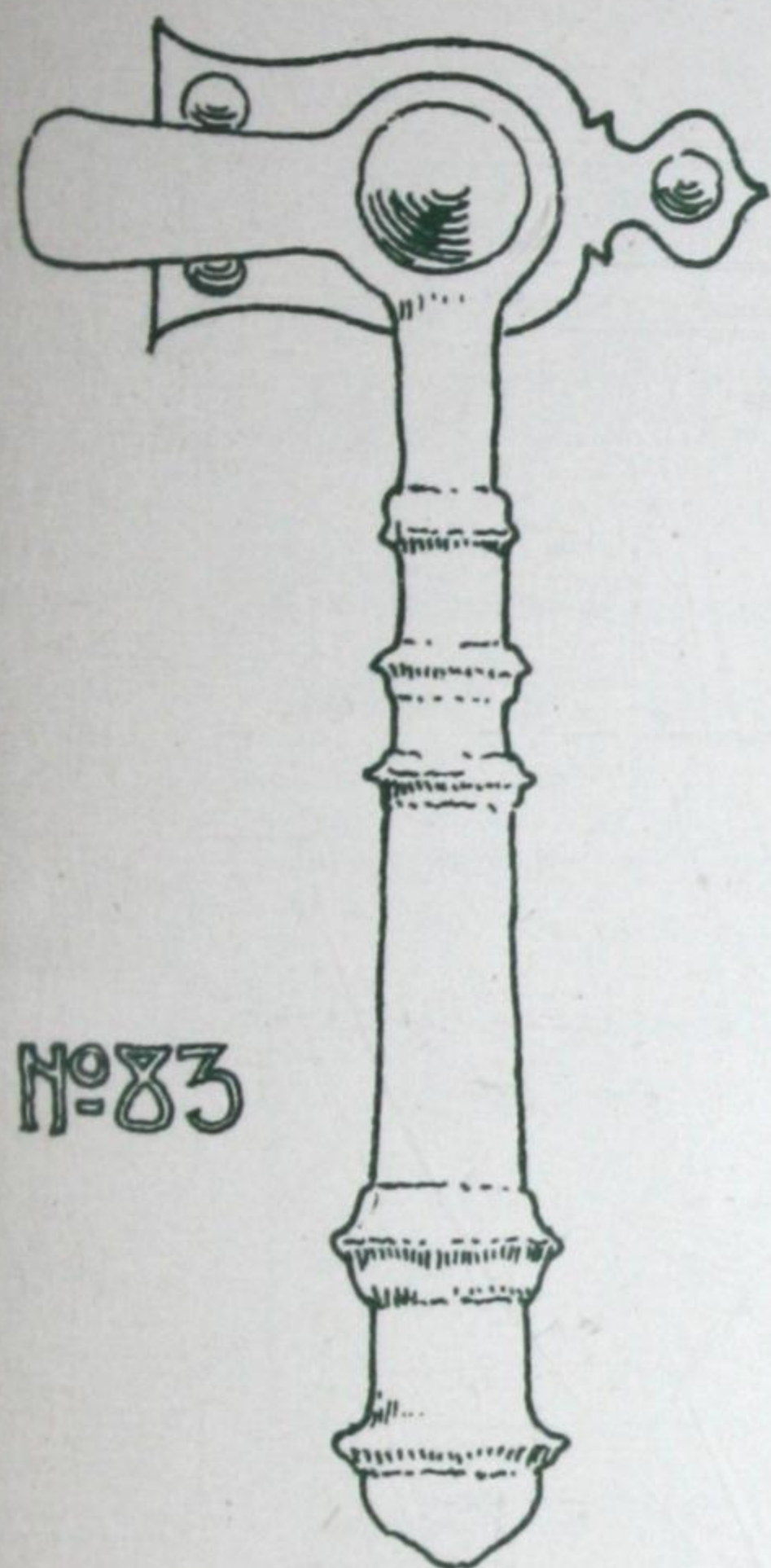
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Strand
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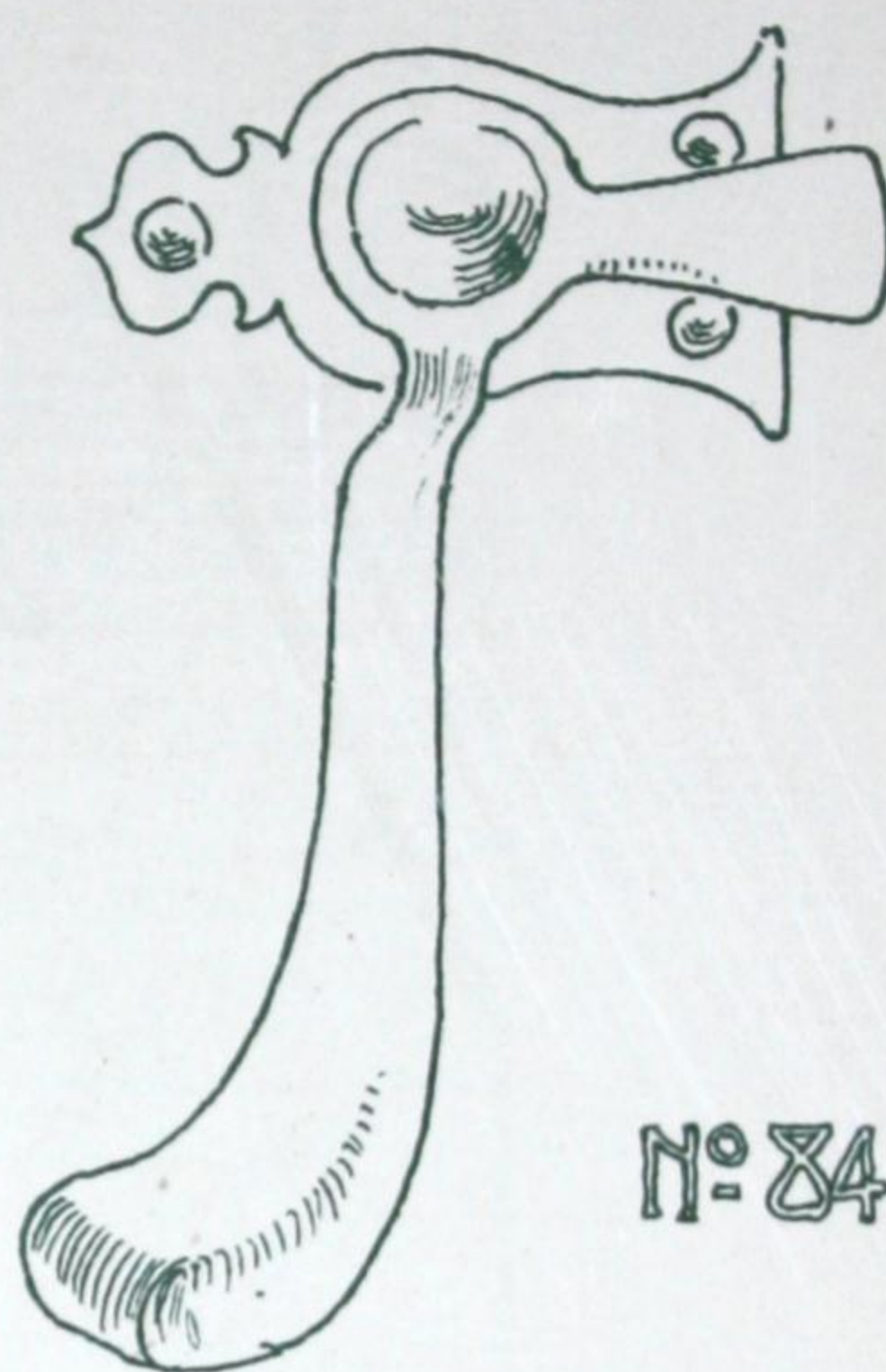
HANDLES FOR
METAL OR WOOD
CASEMENTS TO
SUIT ANY DETAILS

THEY CAN BE MADE IN
A VARIETY OF METALS

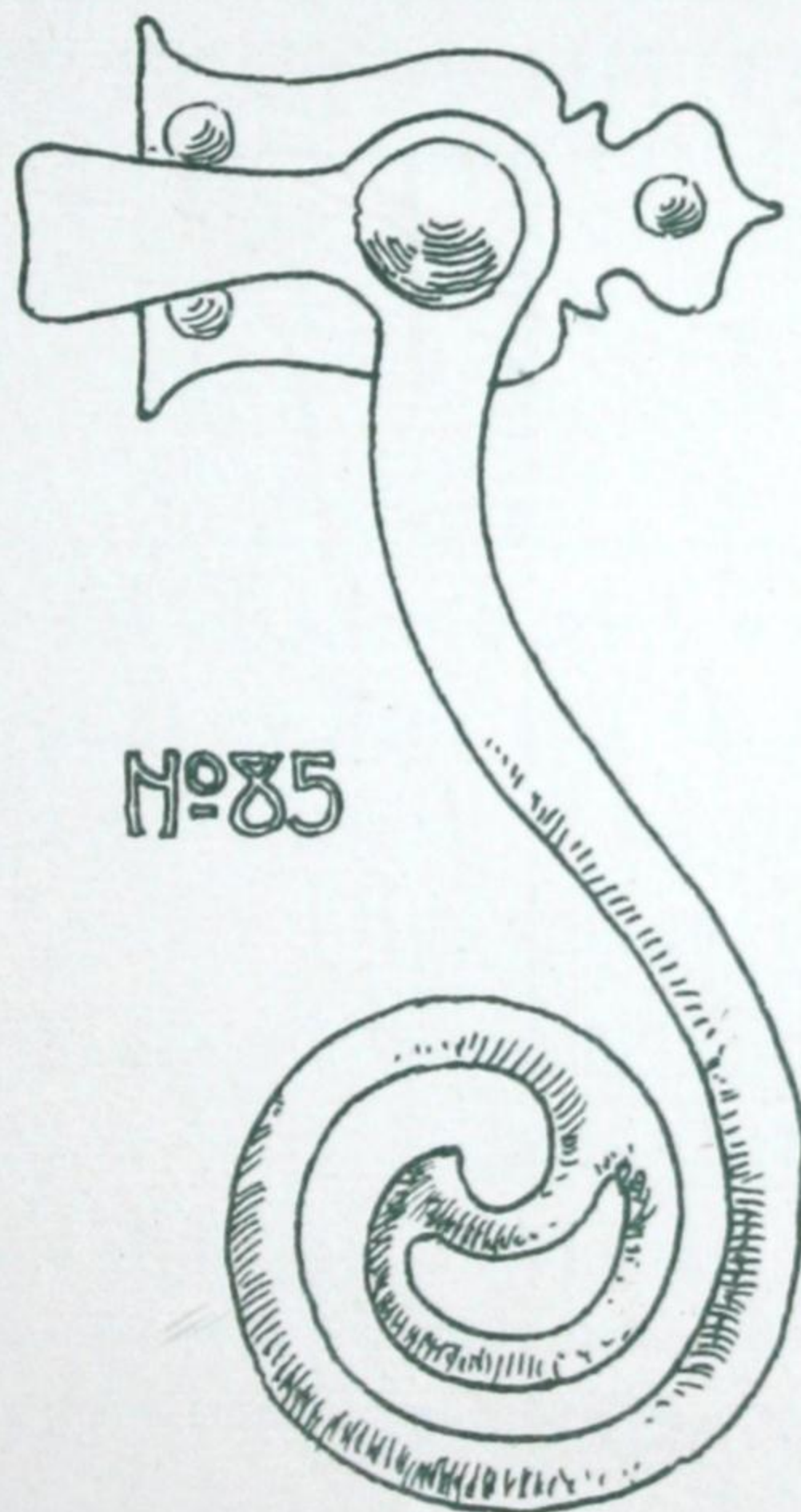
ABOUT FULL SIZE



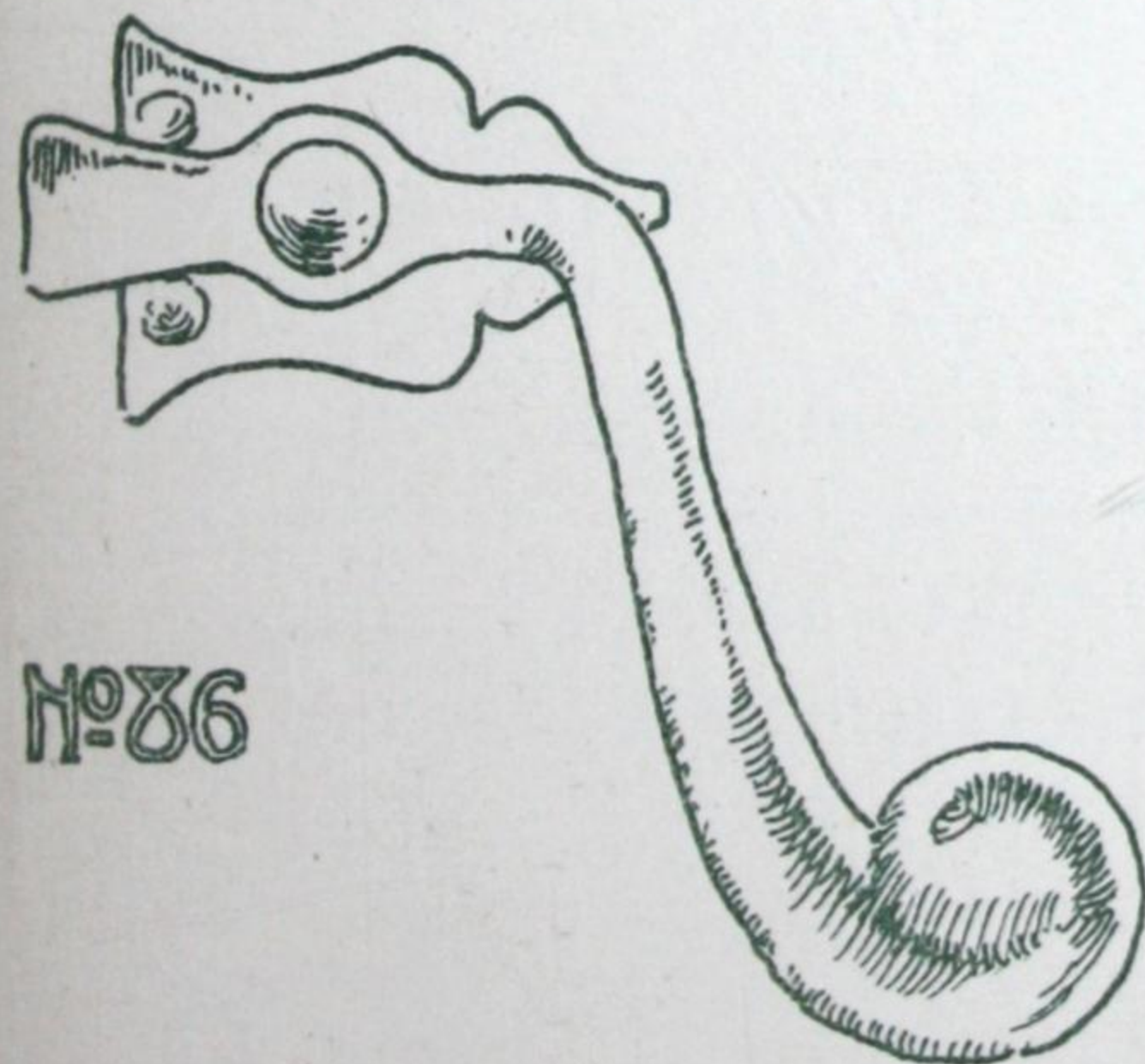
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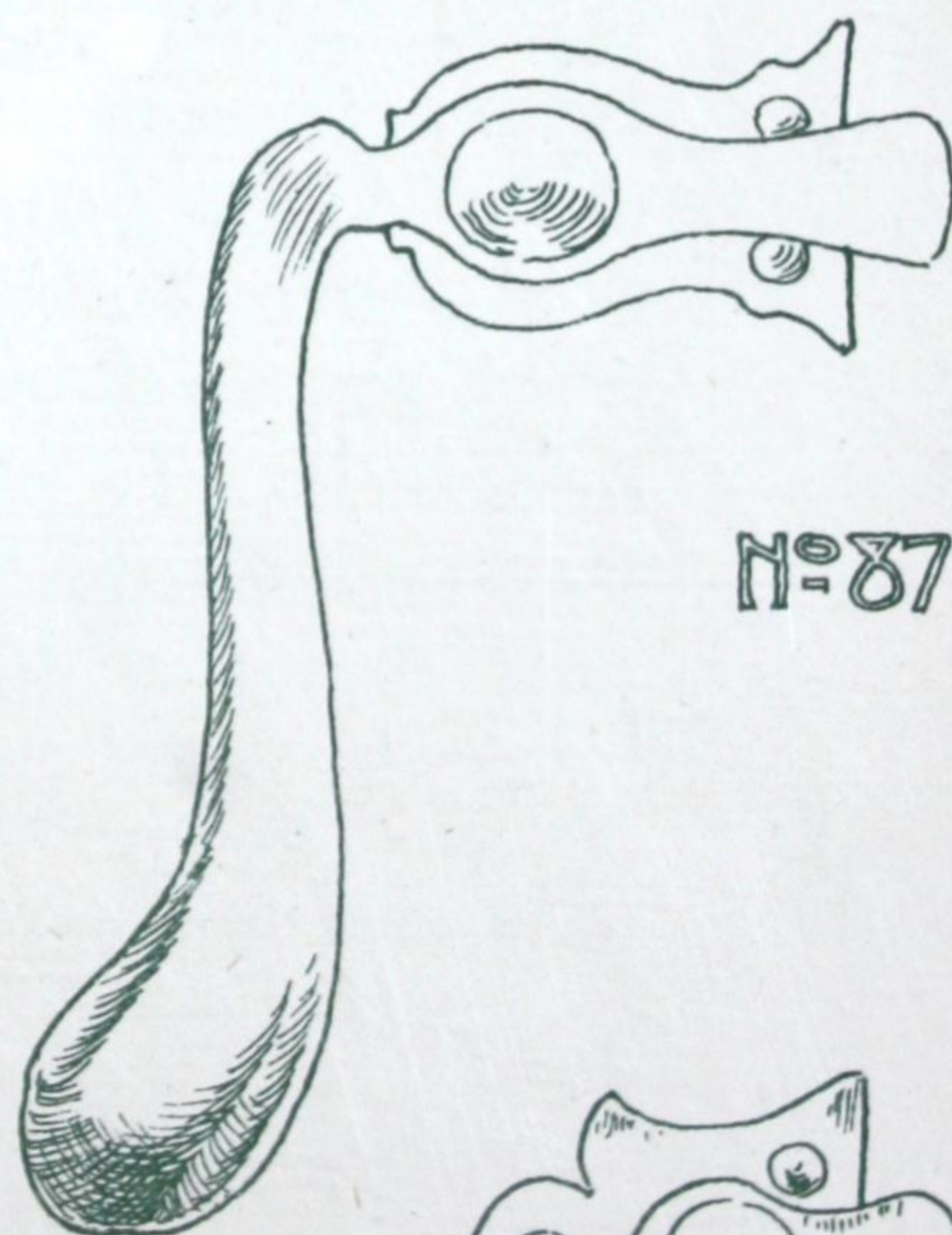
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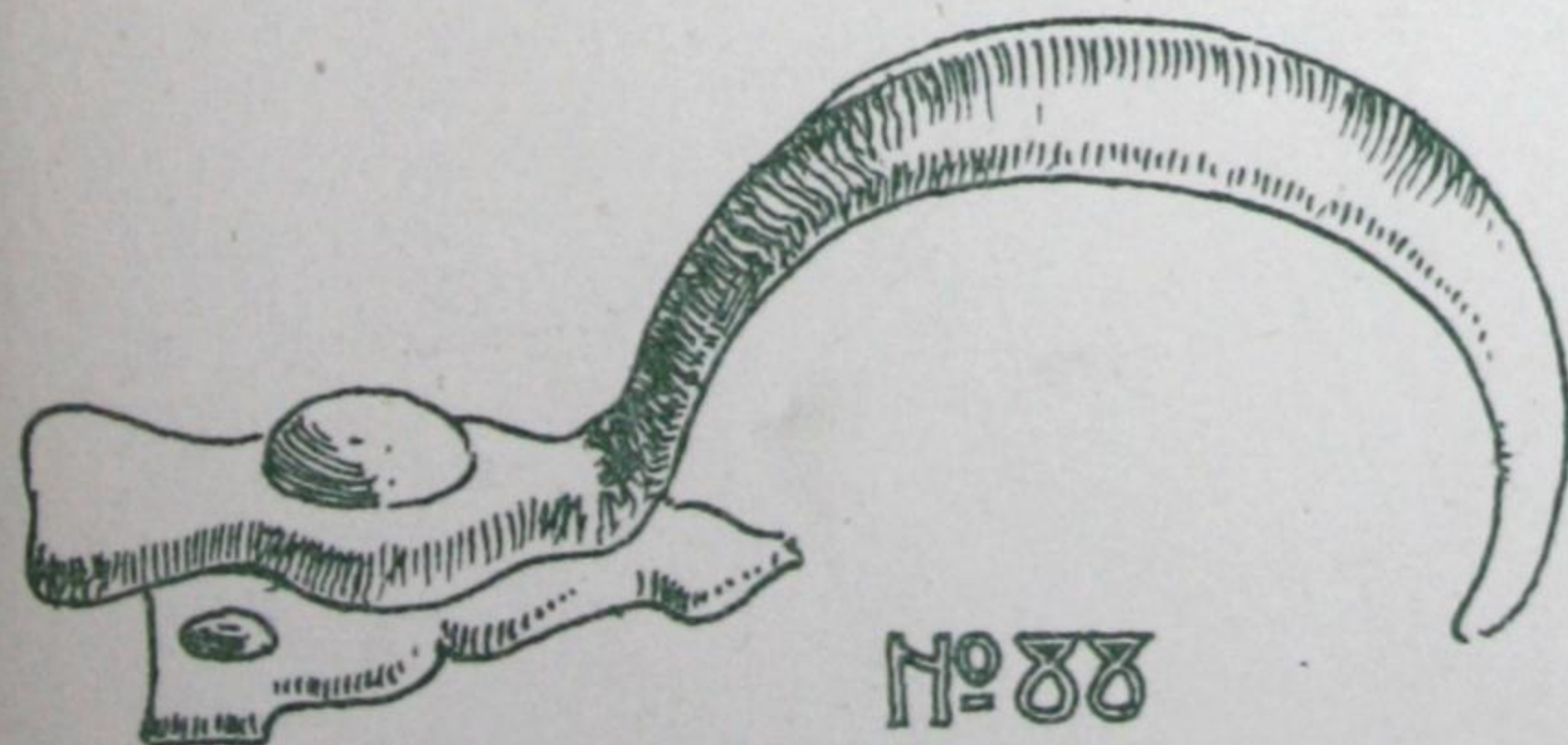
Nº 85



Nº 86



Nº 87



Nº 88



Nº 89

GEORGE WRAGGE, WARDRY METAL WORKS, SALFORD, MANCHESTER.

Handles and Plates (see opposite page) prepared for either wood or metal casements, at prices as below.

IN HAMMERED IRON ONLY.

No. 75	25/- each	No. 79	9/6 each
„ 76	25/- „	„ 80	25/- „
„ 77	20/- „	„ 81	20/- „
„ 78	20/- „	„ 82	20/- „

NOTE. These handles will be finished with an “old armour” or dull bright surface, or left dull as from the anvil if desired; they can be forged in copper or other metals, for which prices will be given.

In ordering, the “hands” should be stated, and details of the woodwork given full size.

Nos. 75 and 76 illustrate a right and left hand respectively.

Special designs will be submitted or quoted for, or architects’ own designs will be carried out and reserved if desired.

Wardry metal
works Salford
Manchester

GEORGE WRAGGE

22 Surrey St
Strand
London W.C

Wrot Metal Handles
for Wood or Iron
Casements

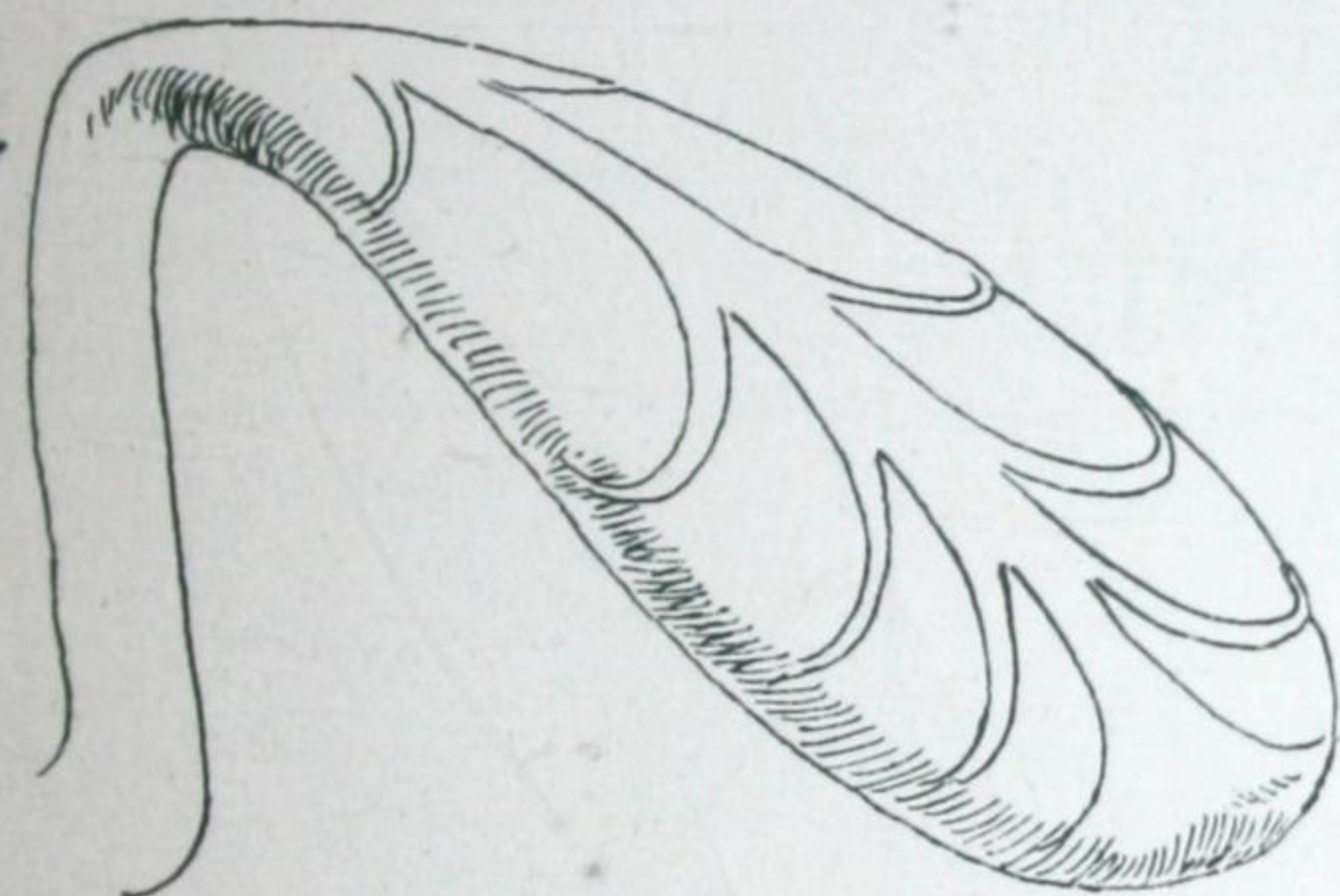
75



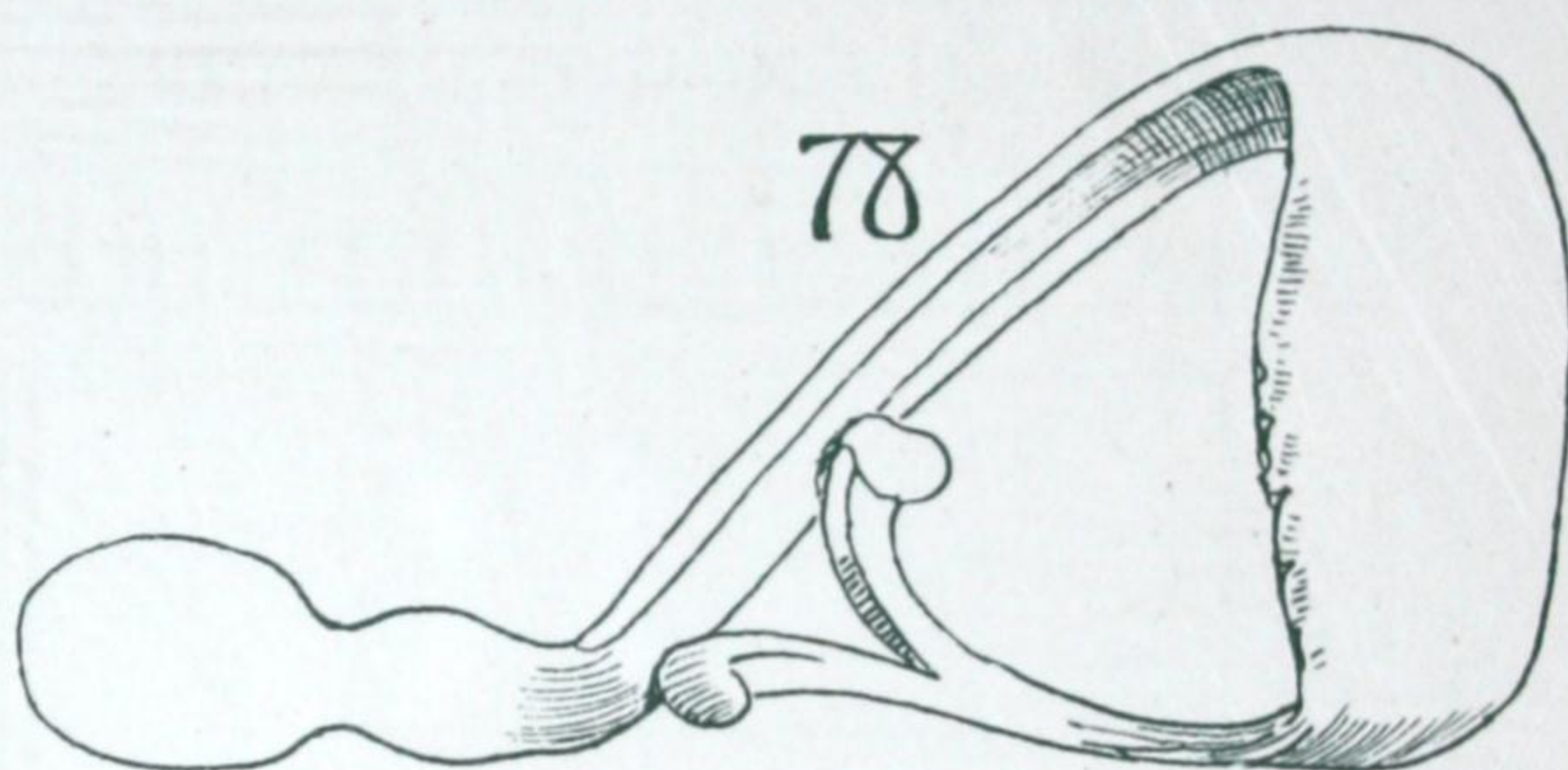
76



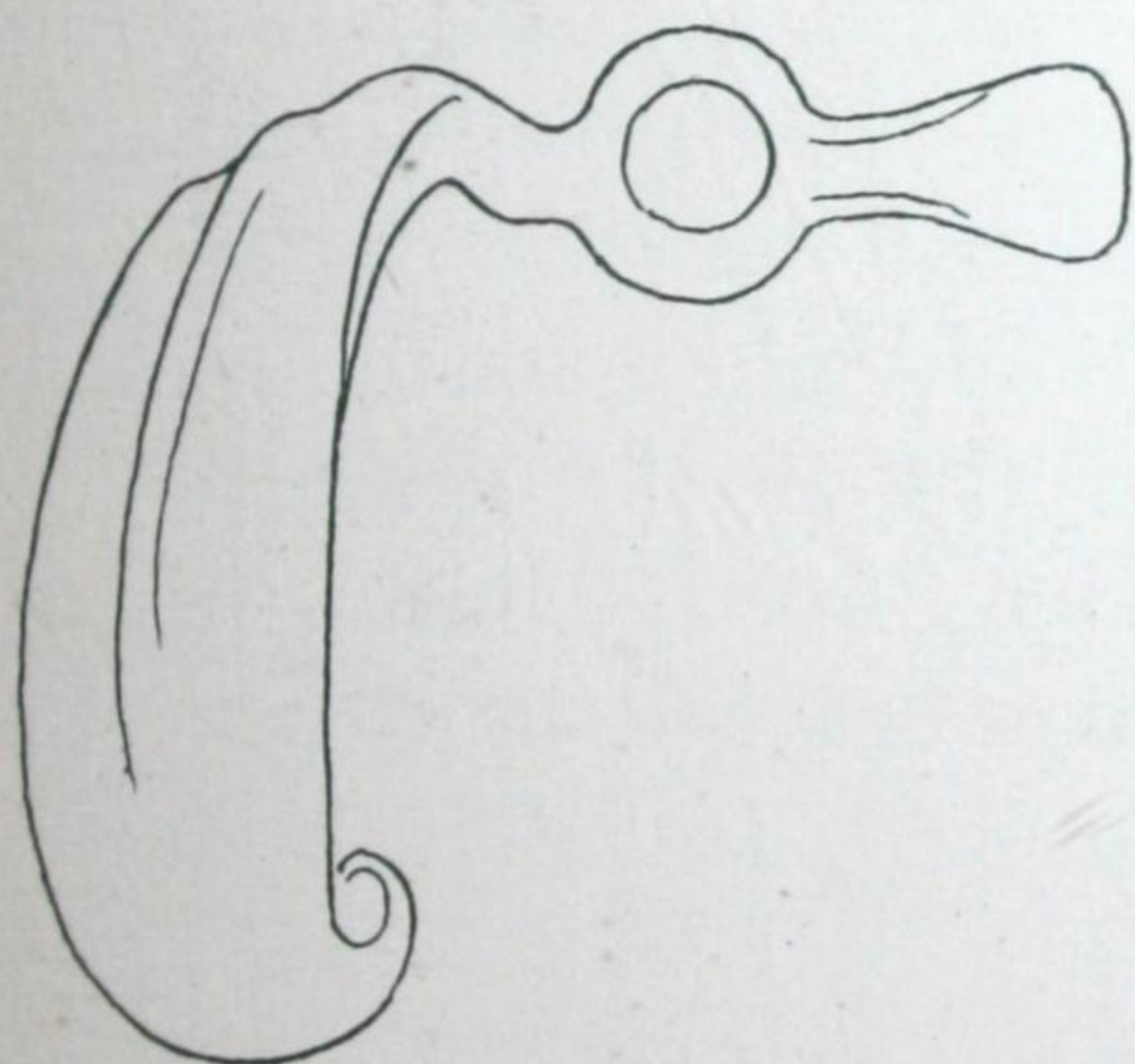
77



78



79



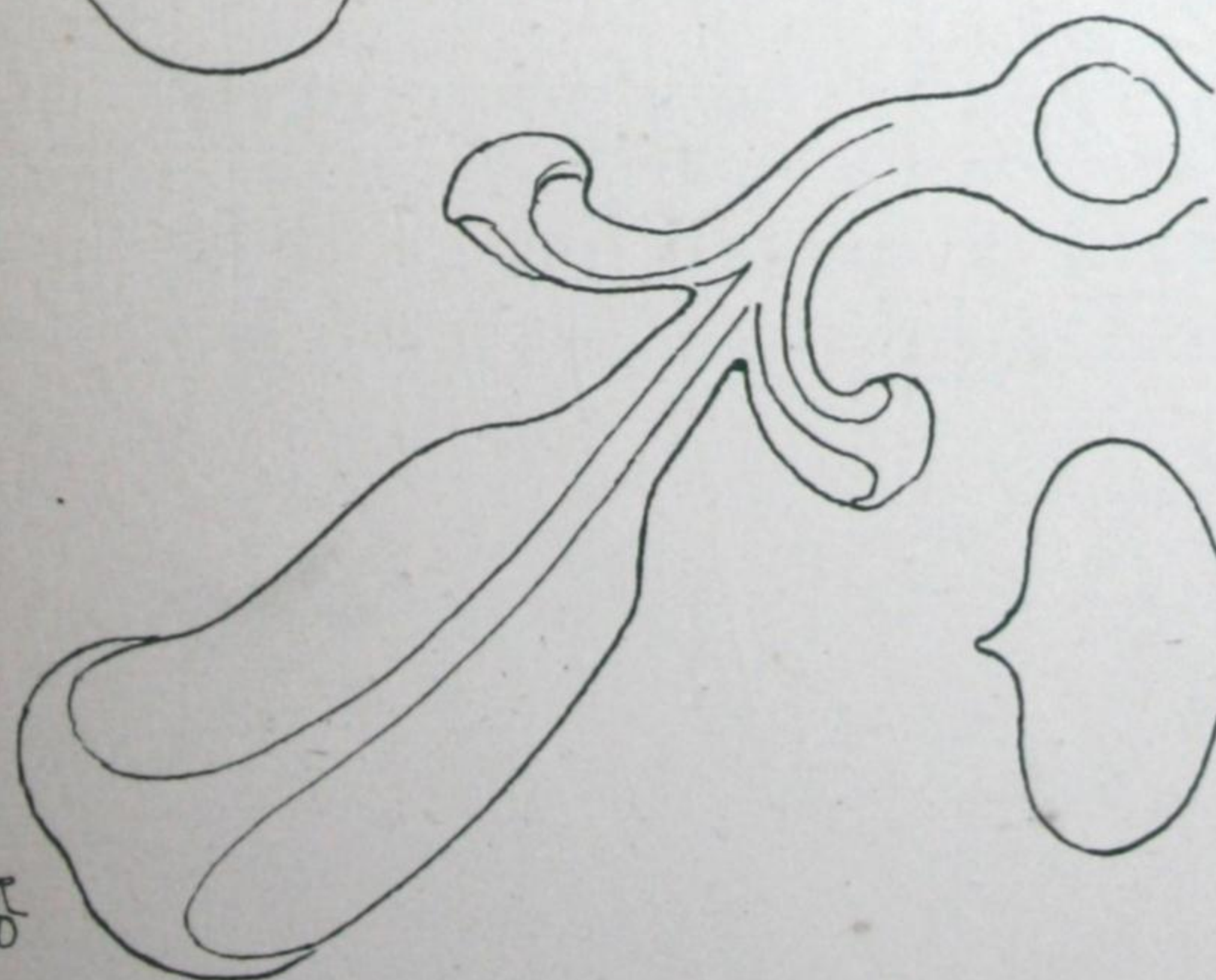
About Half
full size



80



81



82

EDGAR
WOOD

GEORGE WRAGGE, WARDRY METAL WORKS, SALFORD, MANCHESTER.

Handles and Plates (see opposite page) prepared for metal or wood casements, at prices as below.

IN HAMMERED IRON ONLY.

No. 65	21/- each	No. 70	8/6 each
„ 66	22/6 „	„ 71	20/- „
„ 67	11/6 „	„ 72	22/6 „
„ 68	15/- „	„ 73	20/- „
„ 69	13/- „	„ 74	20/- „

NOTE. The examples as illustrated are careful reproductions of old work, and the “feeling” will be thoroughly maintained; they will be finished with an “old armour” or dull bright surface, or left dull as from the anvil if desired; they can be made in hammered copper, bronze, brass, or other metal, and “toned,” for which prices will be given. In ordering, the “hands” should be stated, and details of the woodwork given full size.

Nos. 65 and 66 illustrate a right and left hand respectively.

Special designs will be submitted or quoted for, or architects’ own designs will be carried out or reserved if desired.

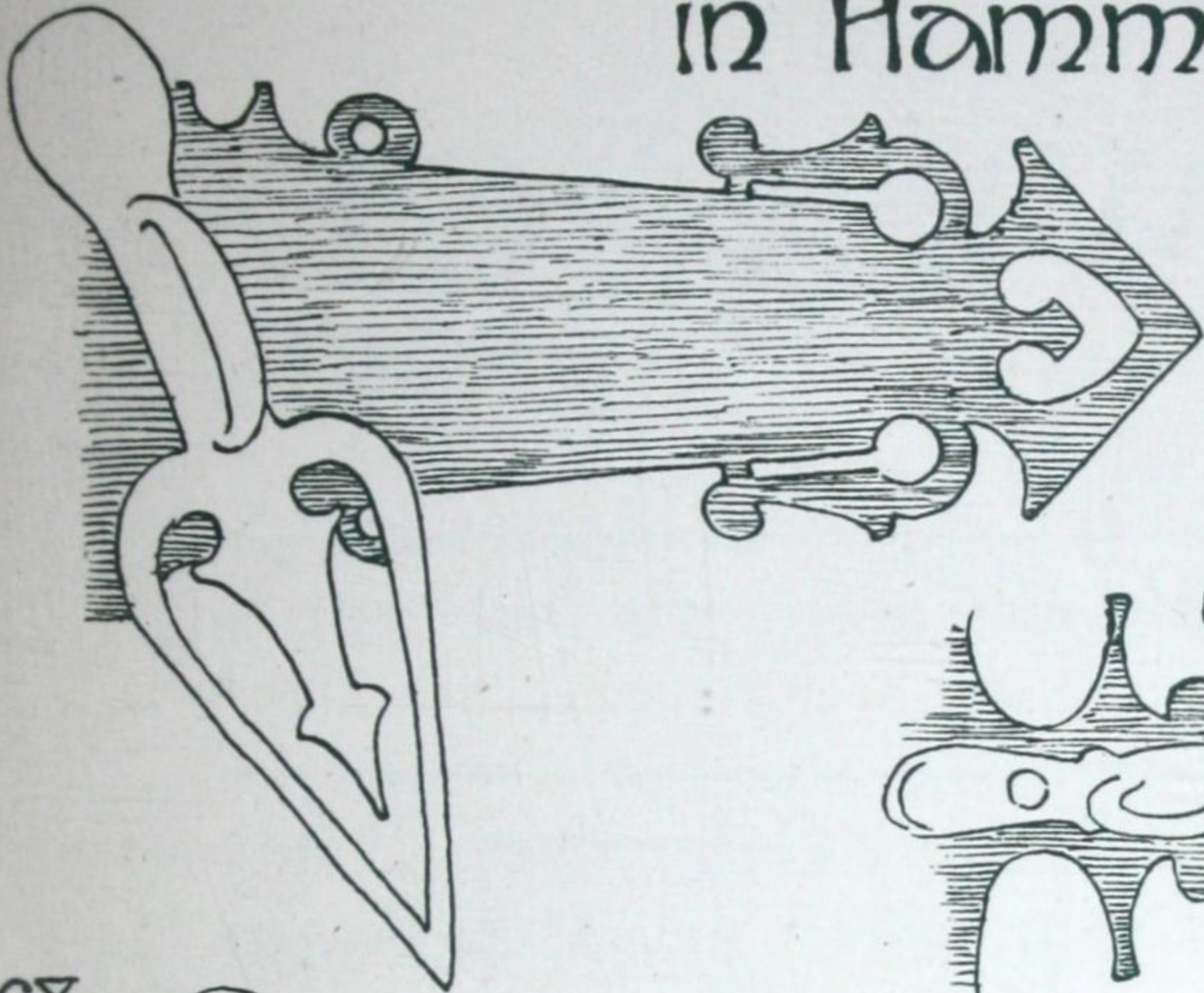
Wardry metal
works Salford
Manchester

GEORGE WRAGGE

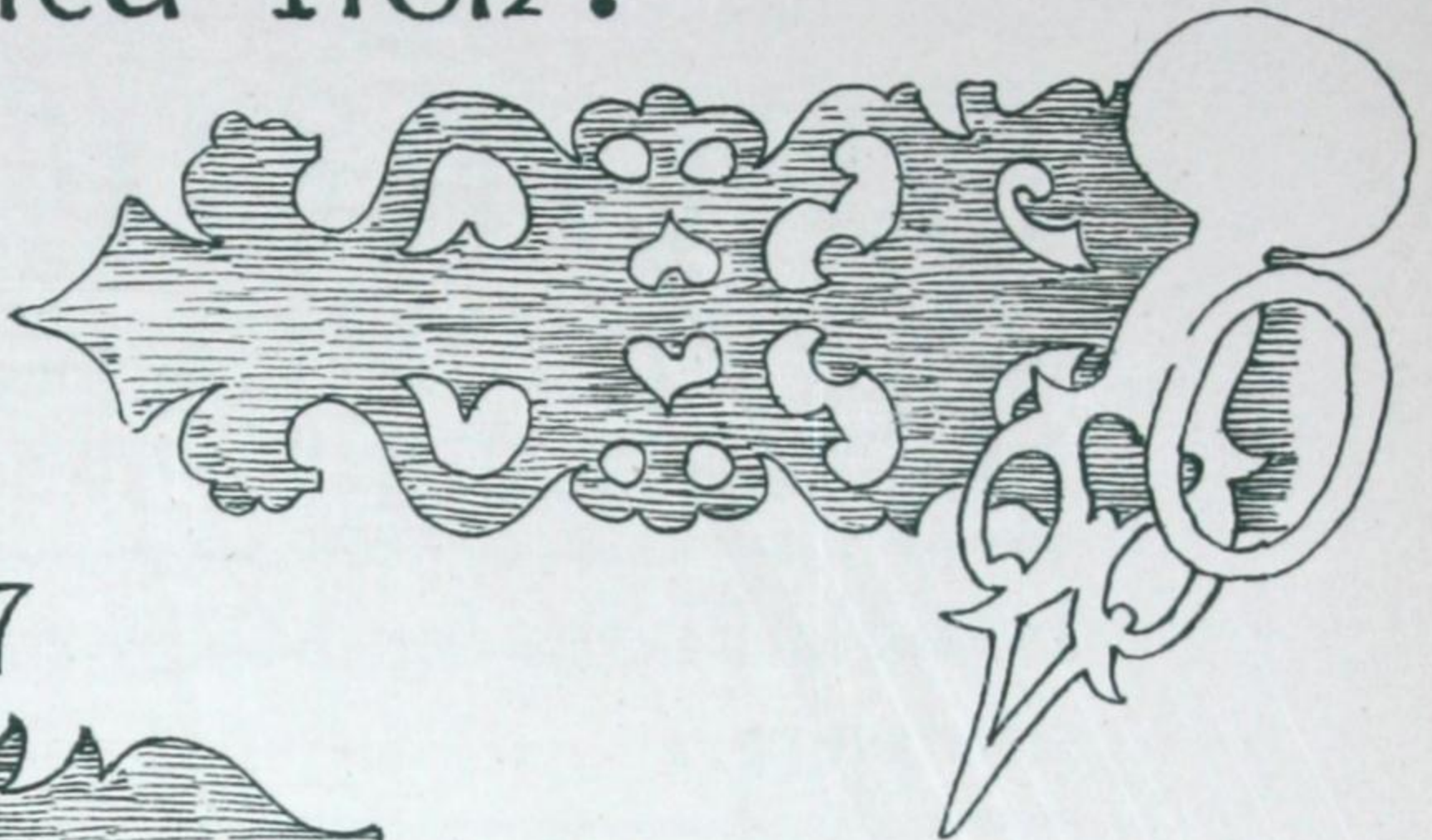
22 Surrey St
Strand
London W.C

Back Plates for Metal
Casements: Old Samples
in Hammered Iron:

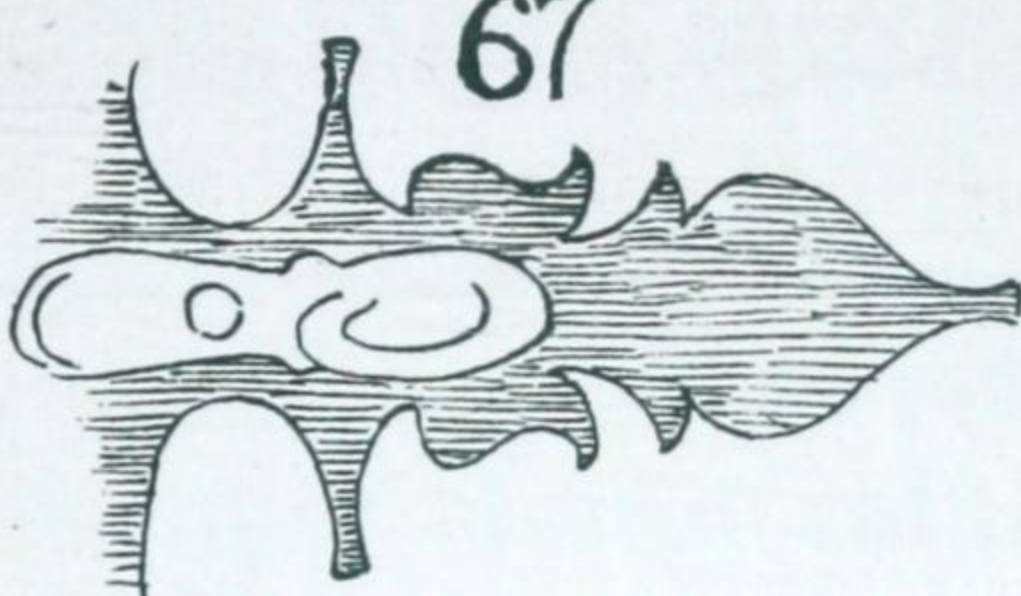
65



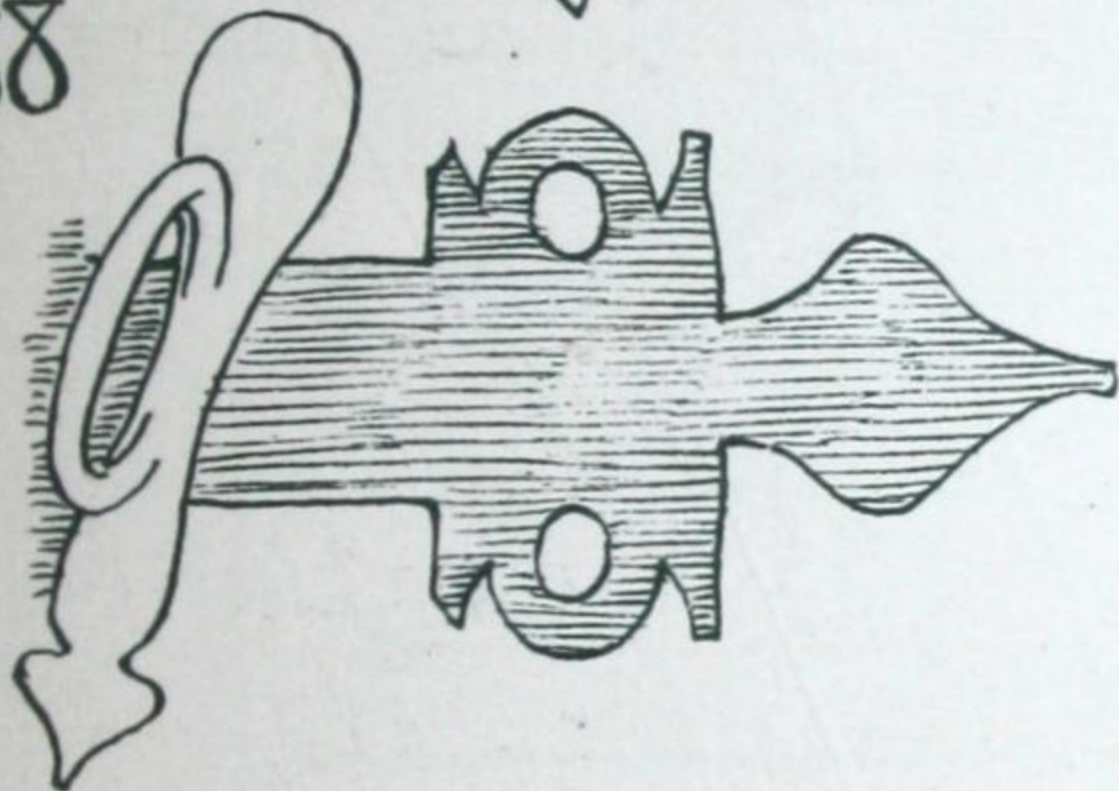
66



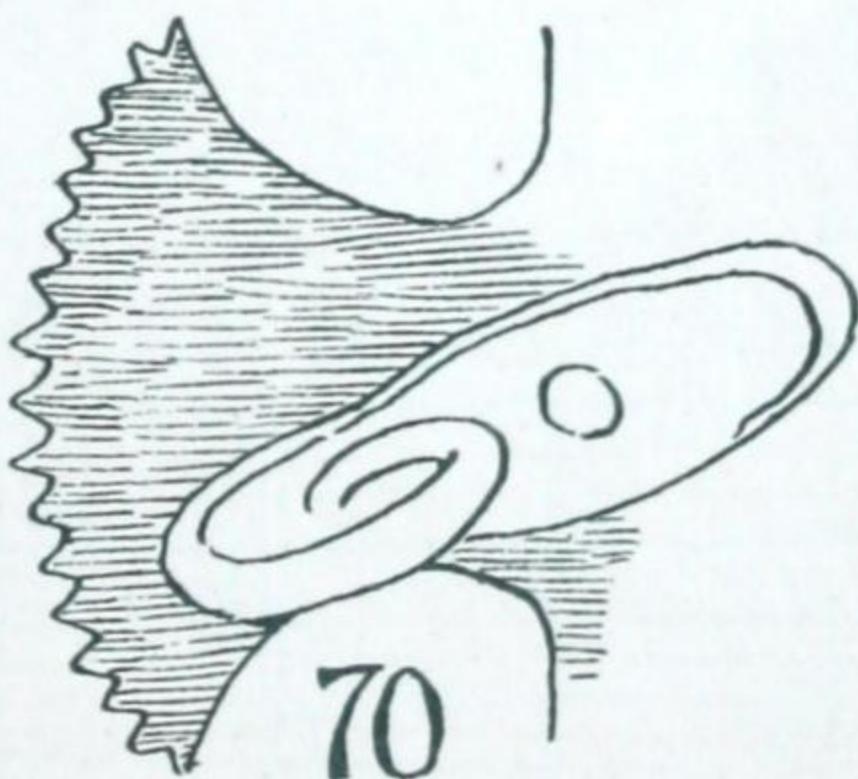
67



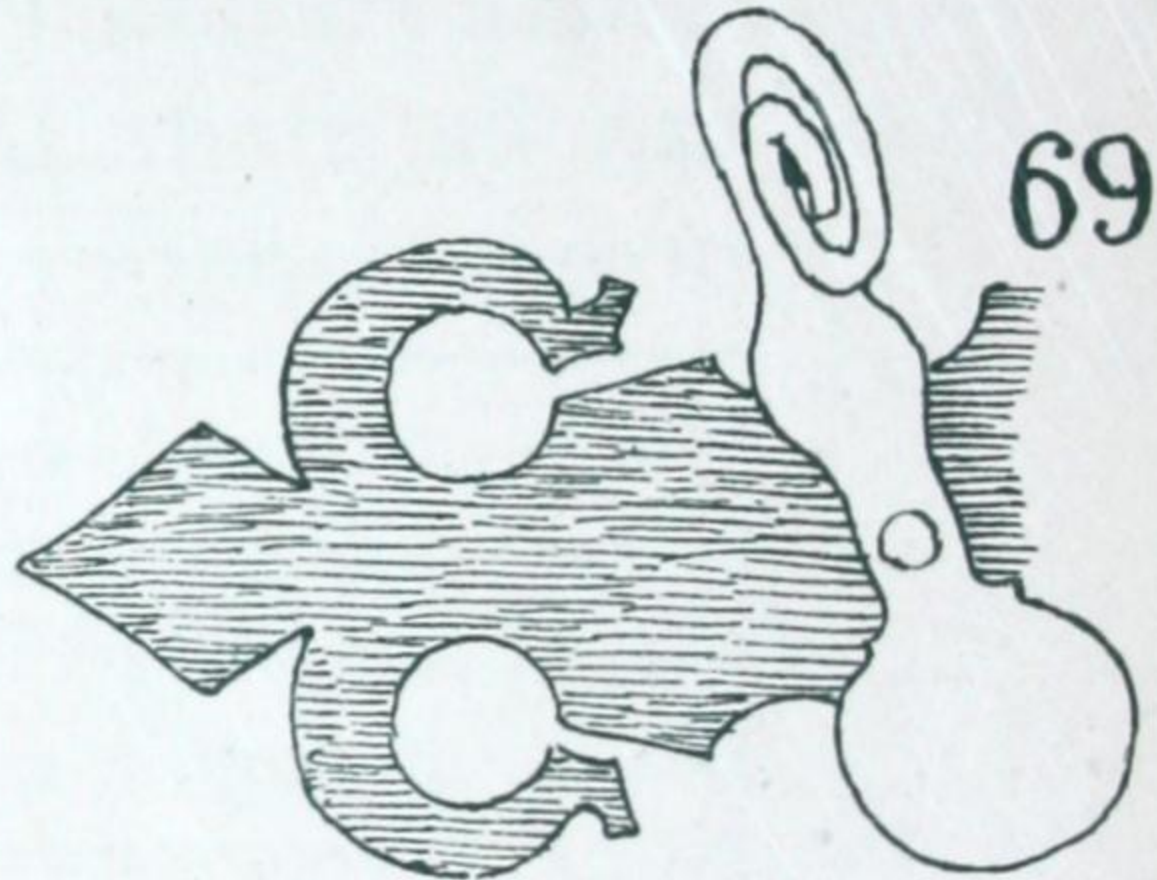
68



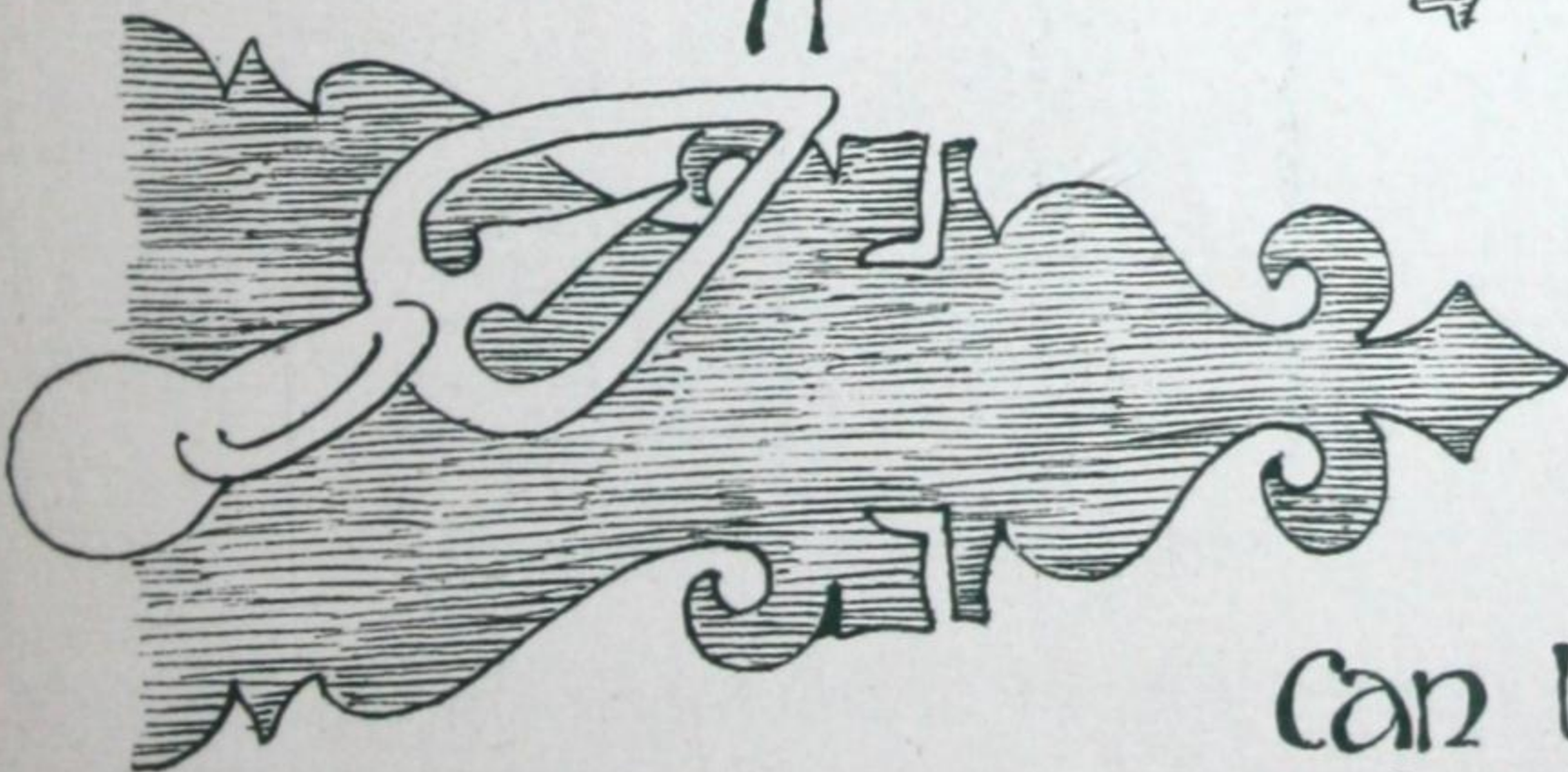
half size
full size



69

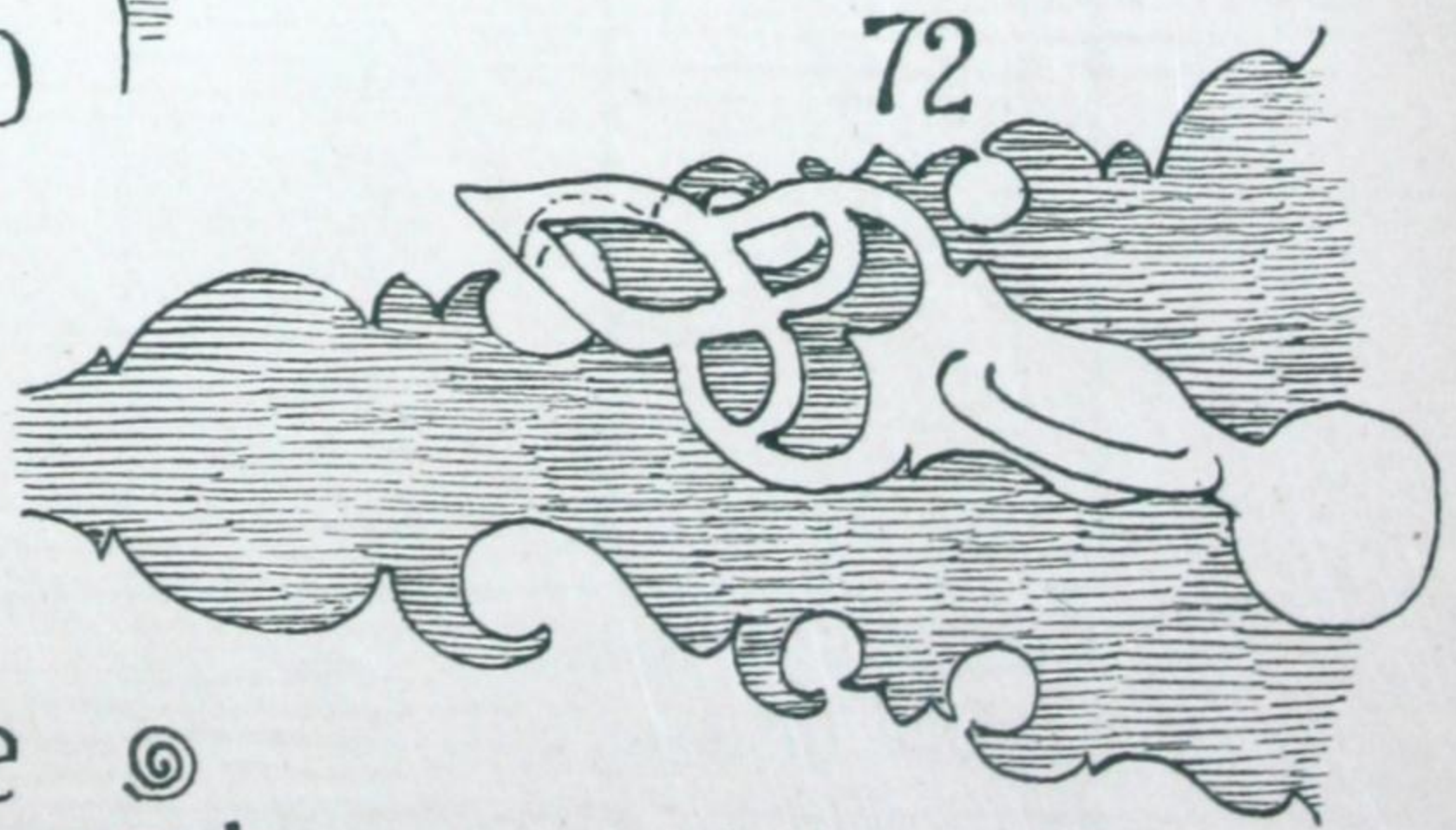


71

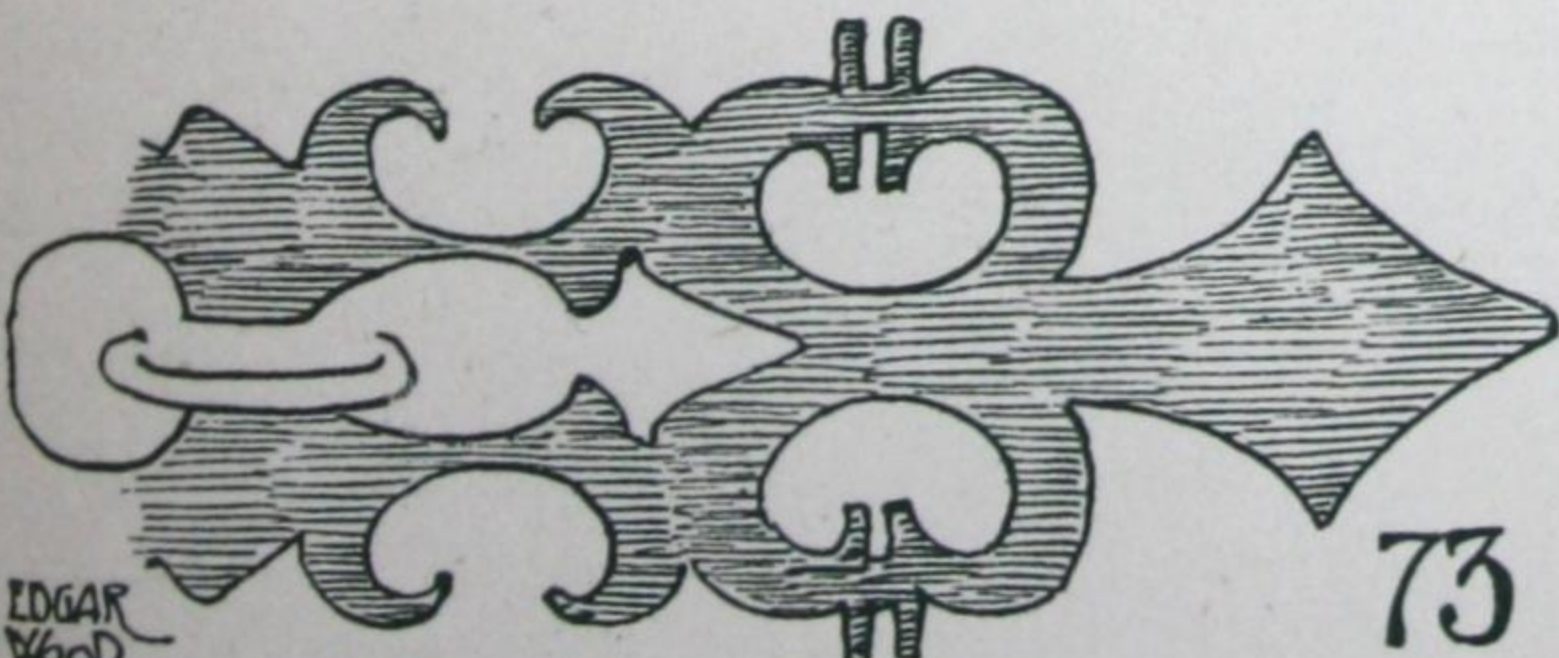


70

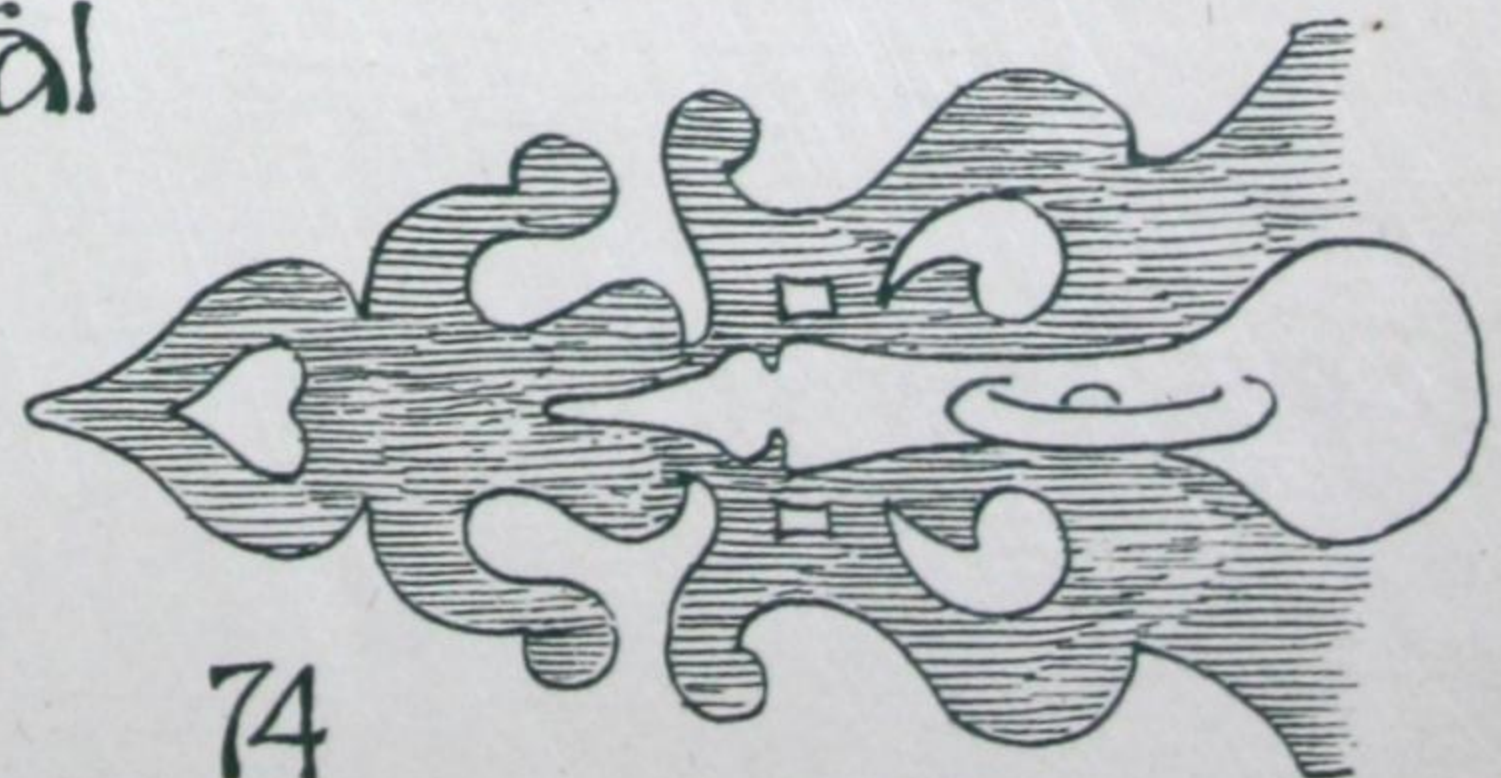
72



Can be
reproduced
in any metal



73



74

EDGAR
WOOD

GEORGE WRAGGE, WARDRY METAL WORKS, SALFORD, MANCHESTER.

Handle Plates for Metal or Wood Casements (see opposite page.)

These Handle Plates can be fitted to any Casements. They can be made in other metals than those priced below at proportionate rates.

No. 1, malleable iron, bronzed or dull blacked, fitted up with coinage metal working parts.

No. 2, hammered iron, finished dull bright.

No. 3, coinage metal, plainly filed.

No. 4, coinage metal, polished and toned, or bronzed.

HANDLE PLATES.				
Nos.	1.	2.	3.	4.
50	1/6	7/6	4/-	4/6
51	1/6	7/-	3/6	4/-
52	1/9	12/6	5/6	6/-
53	1/9	10/6	5/-	5/6
54	1/9	10/6	5/-	5/6
55	1/9	10/6	5/-	5/6
56	2/6	15/-	9/-	10/-


For Saddle Bars see page 34.

Special designs will be submitted or quoted for, or architects' own designs will be carried out or reserved if desired.

Wardry metal
works Salford
Manchester

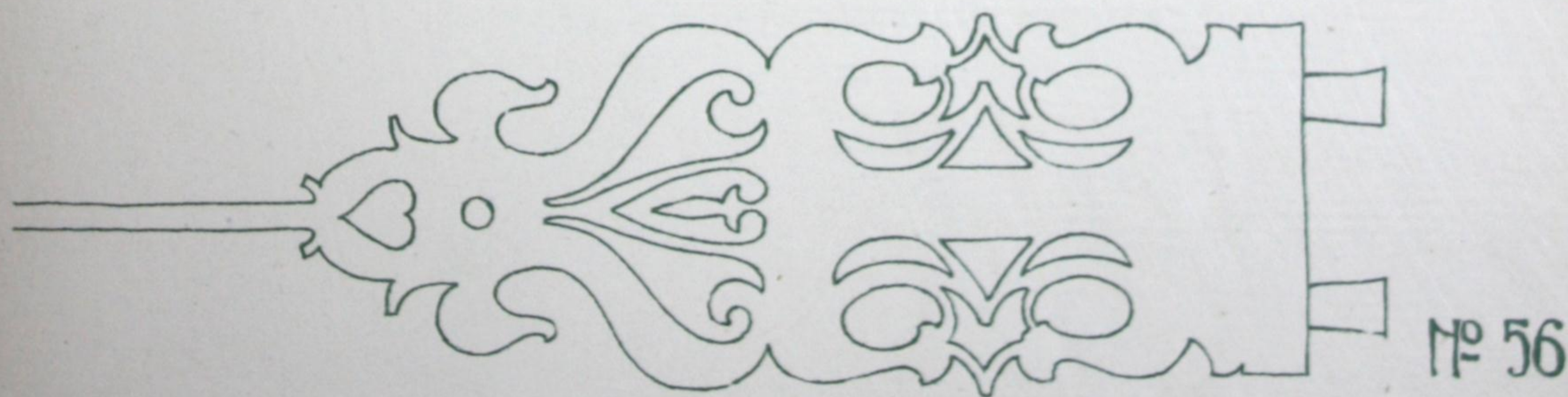
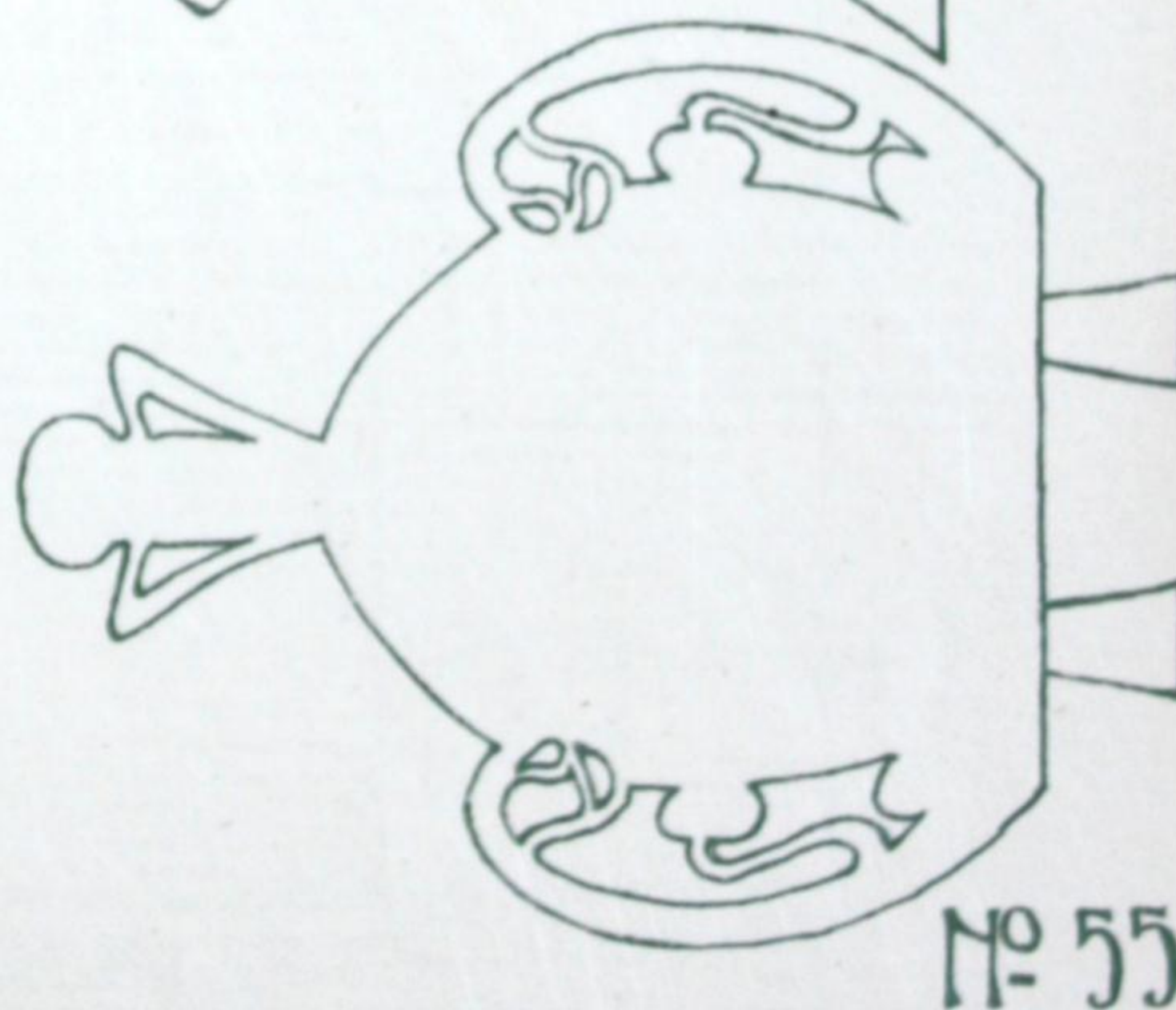
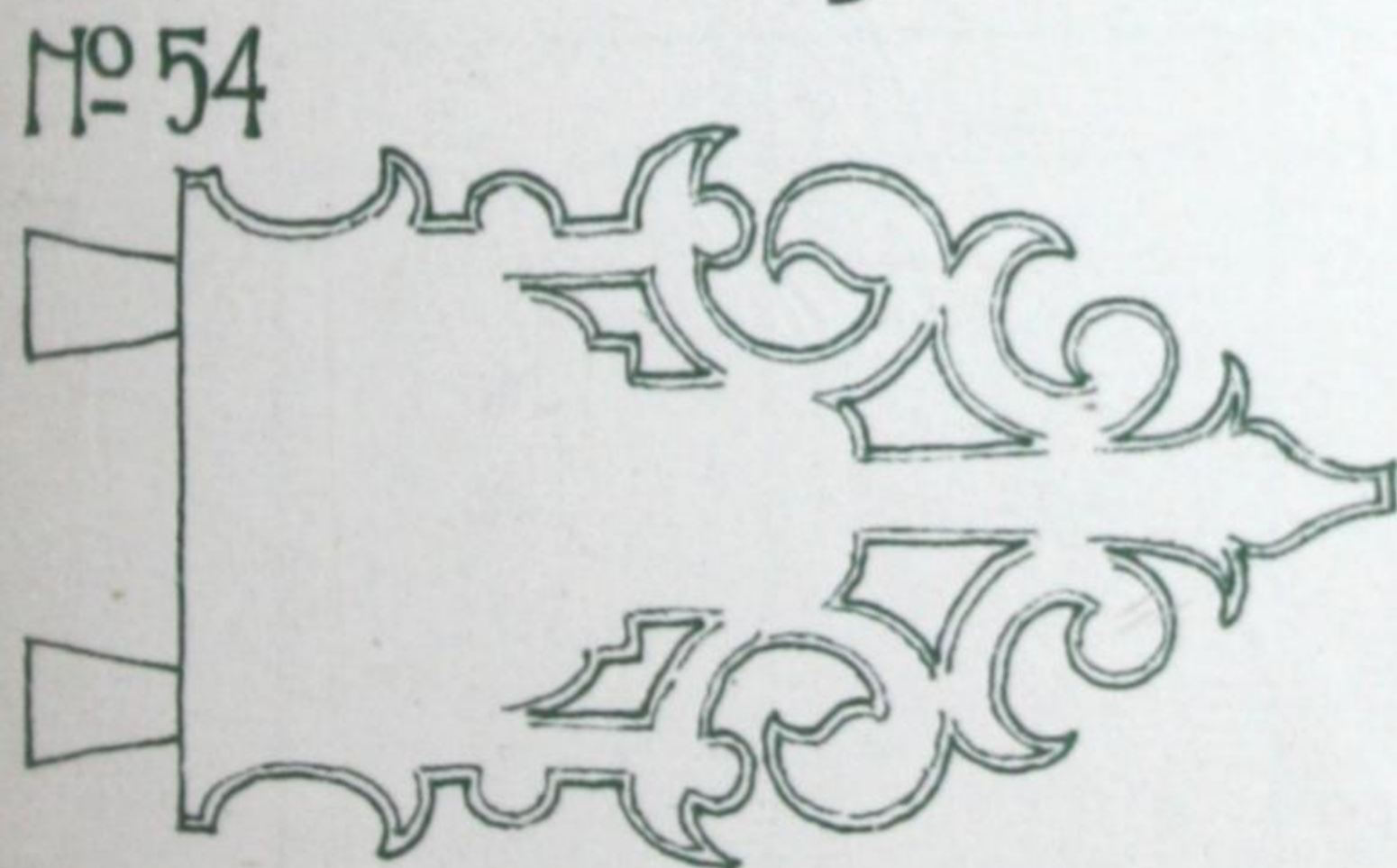
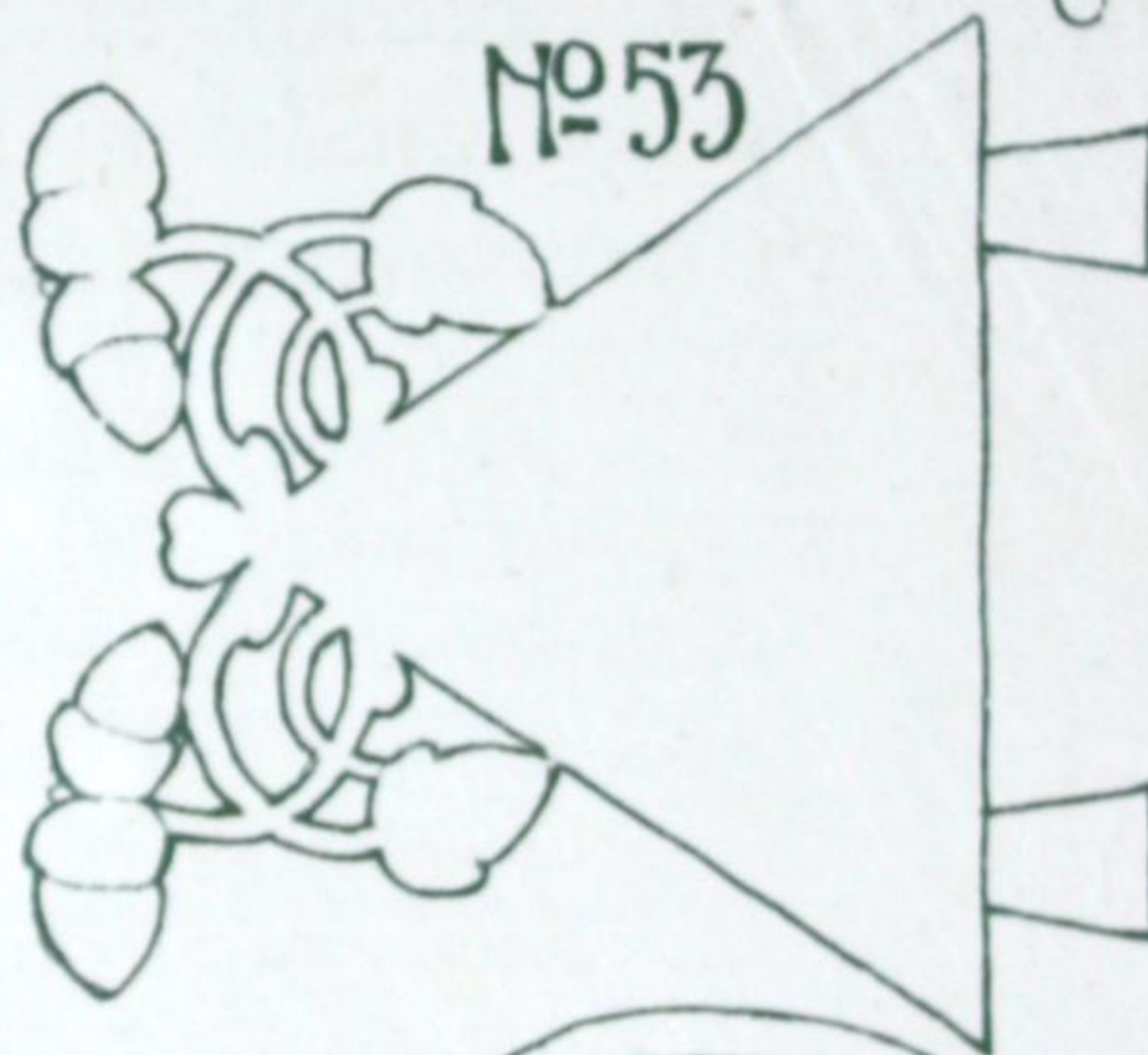
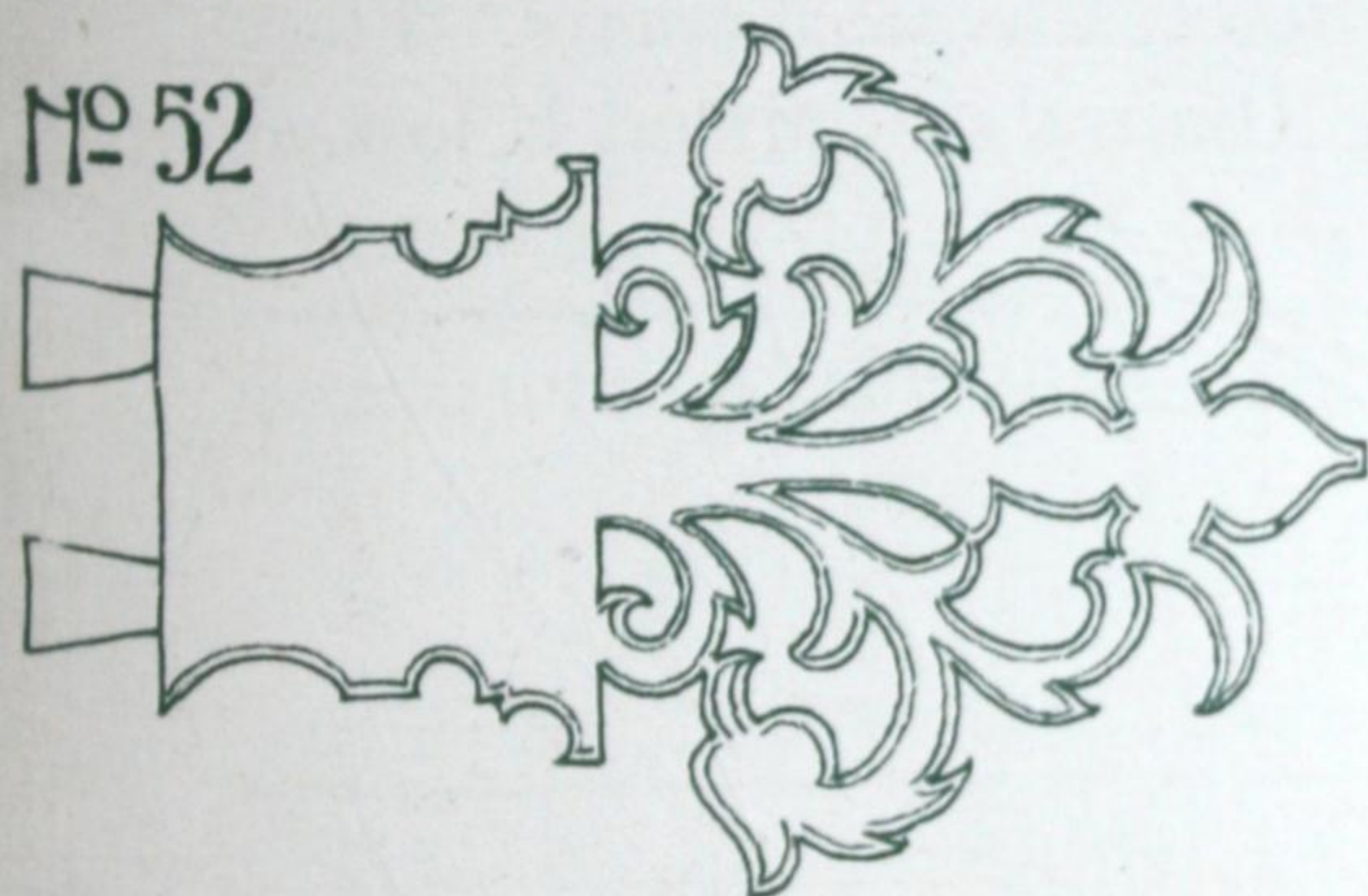
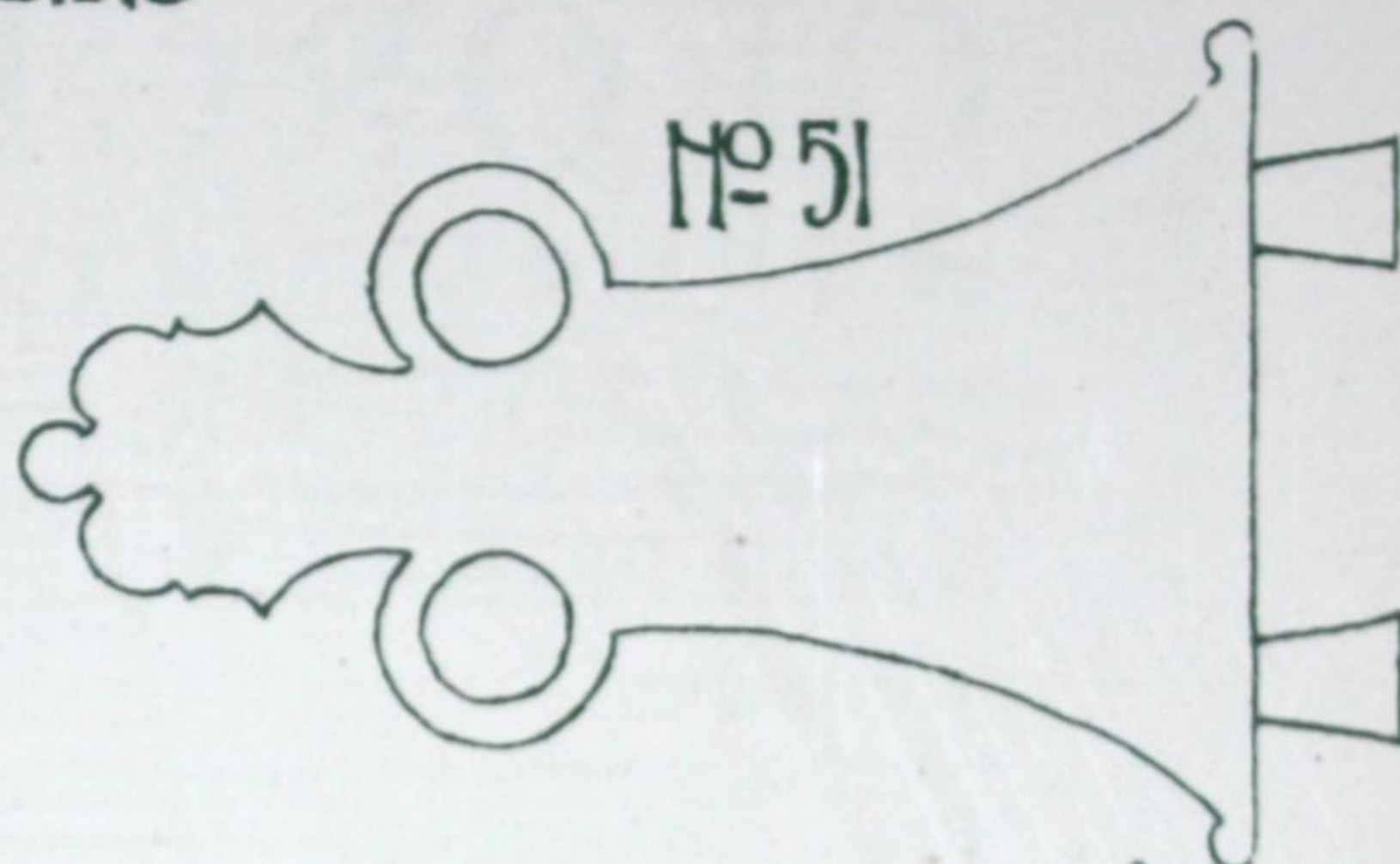
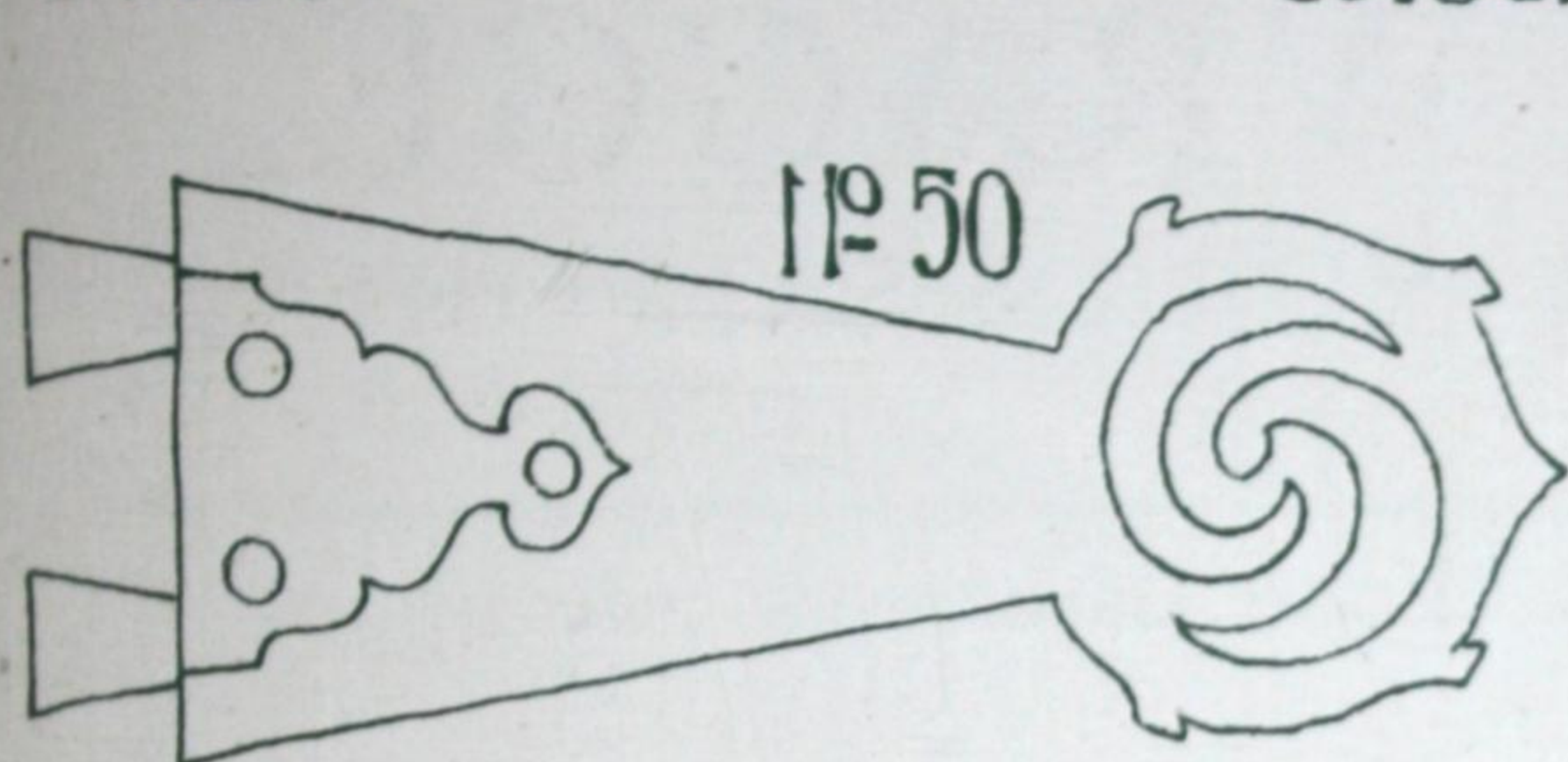
GEORGE WRAGGE

22 Surrey St
Strand
London W.C

Made in
any 
© metal

Back Plates
for metal 
casements

Half full
© size



GEORGE WRAGGE,

WARDRY METAL WORKS, SALFORD, MANCHESTER.

Handle Plates for Metal or Wood Casements (see opposite page.)

These Handle Plates can be fitted to any Casements. They can be made in other metals than those priced below at proportionate rates.

No. 1, malleable iron, bronzed or dull blacked, fitted up with coinage metal working parts.

No. 2, hammered iron, finished dull bright.

No. 3, coinage metal, plainly filed.

No. 4, coinage metal, polished and toned, or bronzed.

HANDLE PLATES.				
Nos.	1	2	3	4
57	1/9	9/6	4/6	5/-
58	1/6	7/-	3/6	4/-
59	1/9	10/6	5/-	5/6
60	1/9	10/6	5/-	5/6
61	1/9	9/6	5/-	5/6
62	1/9	9/6	5/-	5/6
63	2/-	11/6	6/-	6/6
64	1/9	9/6	5/6	6/-

For Saddle Bars see page 34.

Special designs will be submitted or quoted for, or architects' own designs will be carried out and reserved if desired.

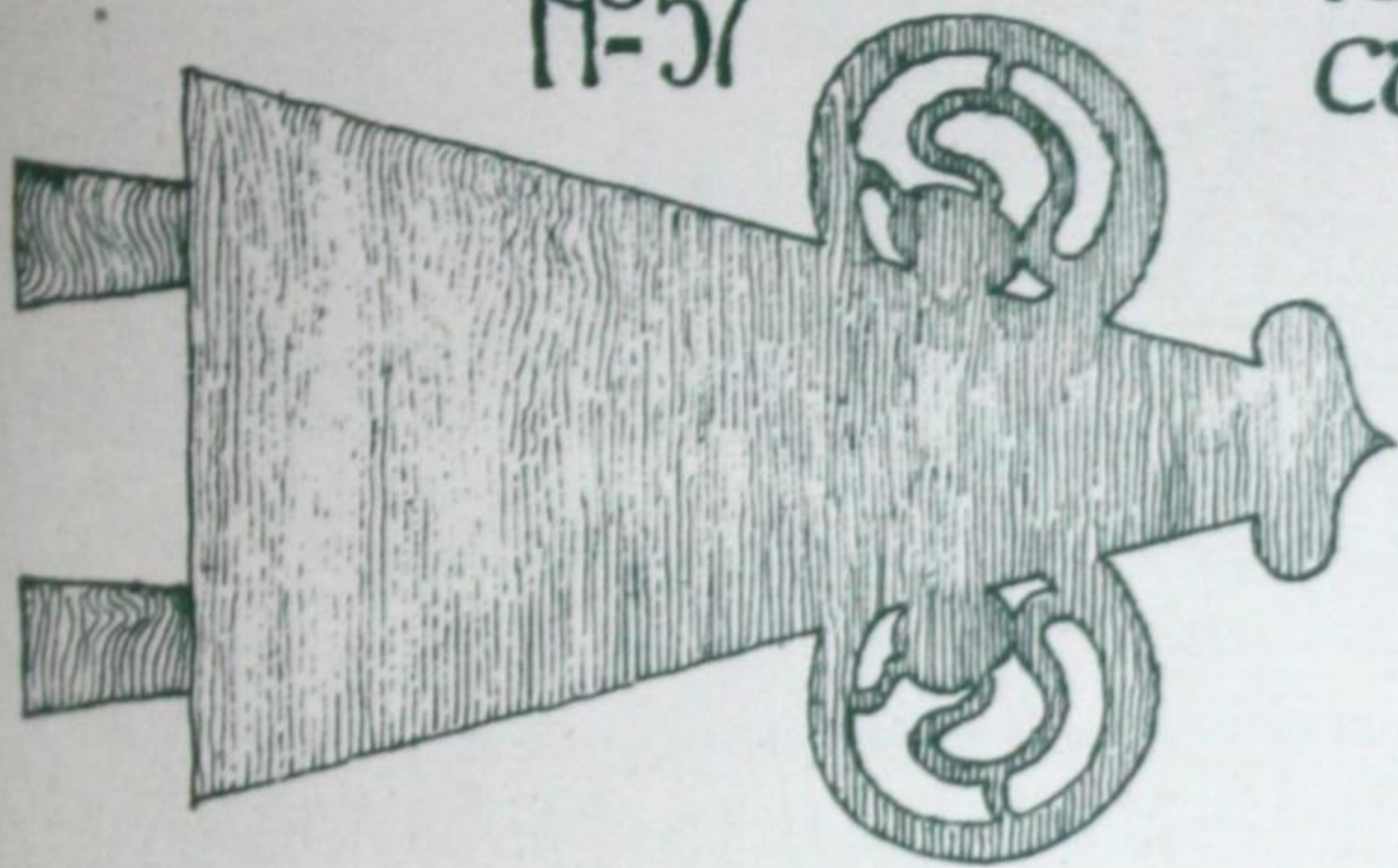
Wardry metal
works Salford
Manchester

GEORGE WRAGGE

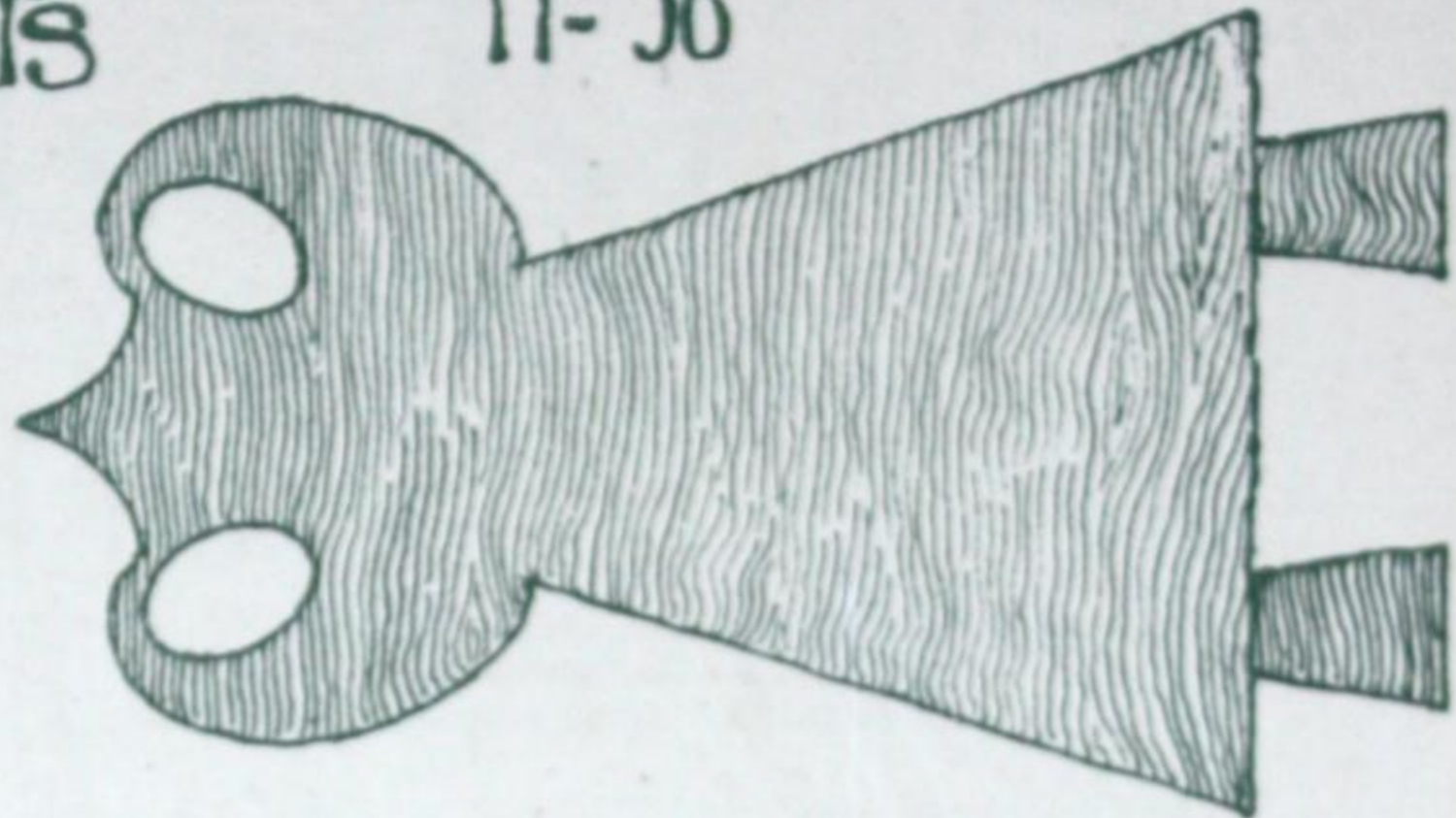
22 Surrey St
Strand
London W.C

Back Plates
for metal ©
casements

Nº 57

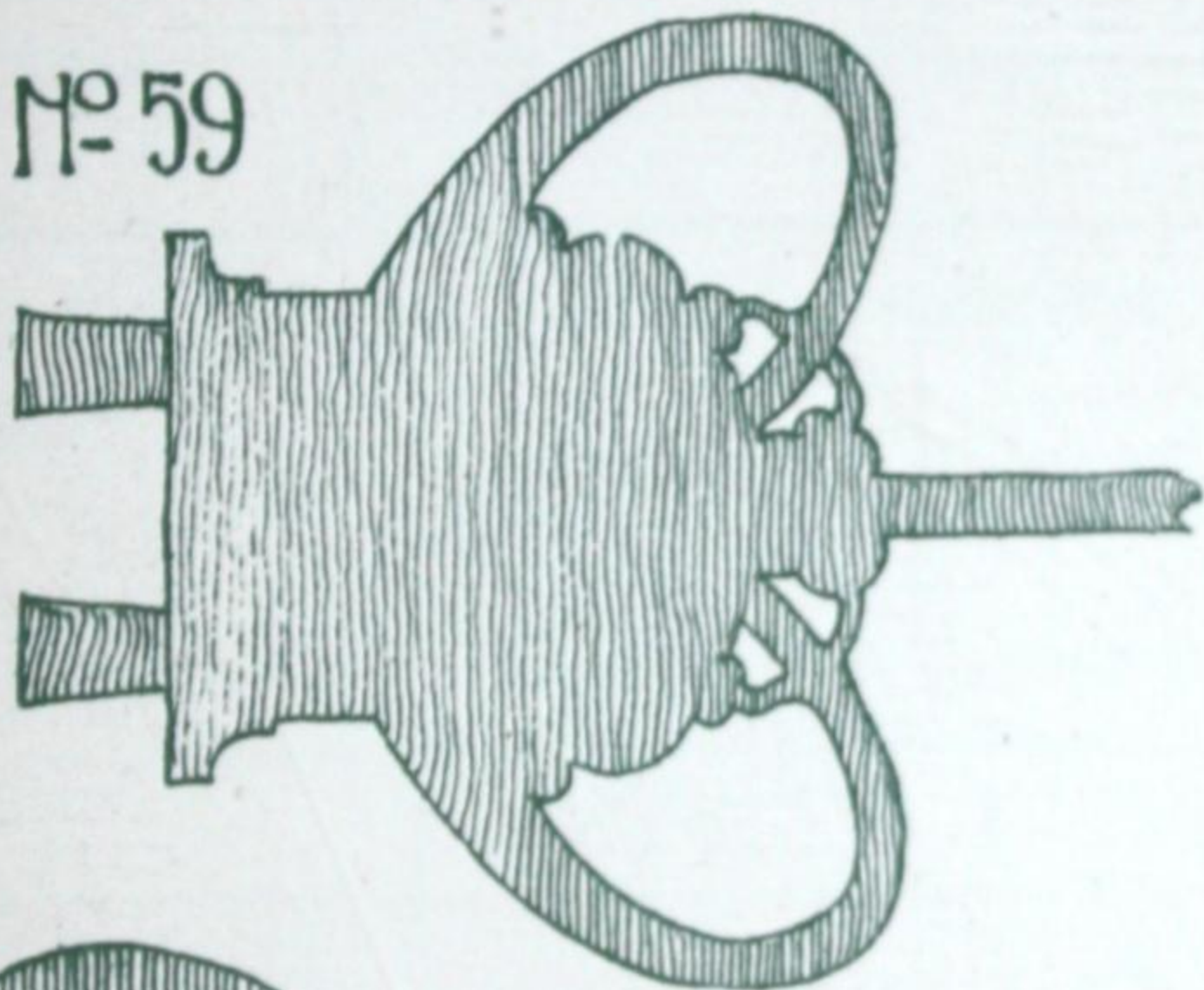


Nº 58

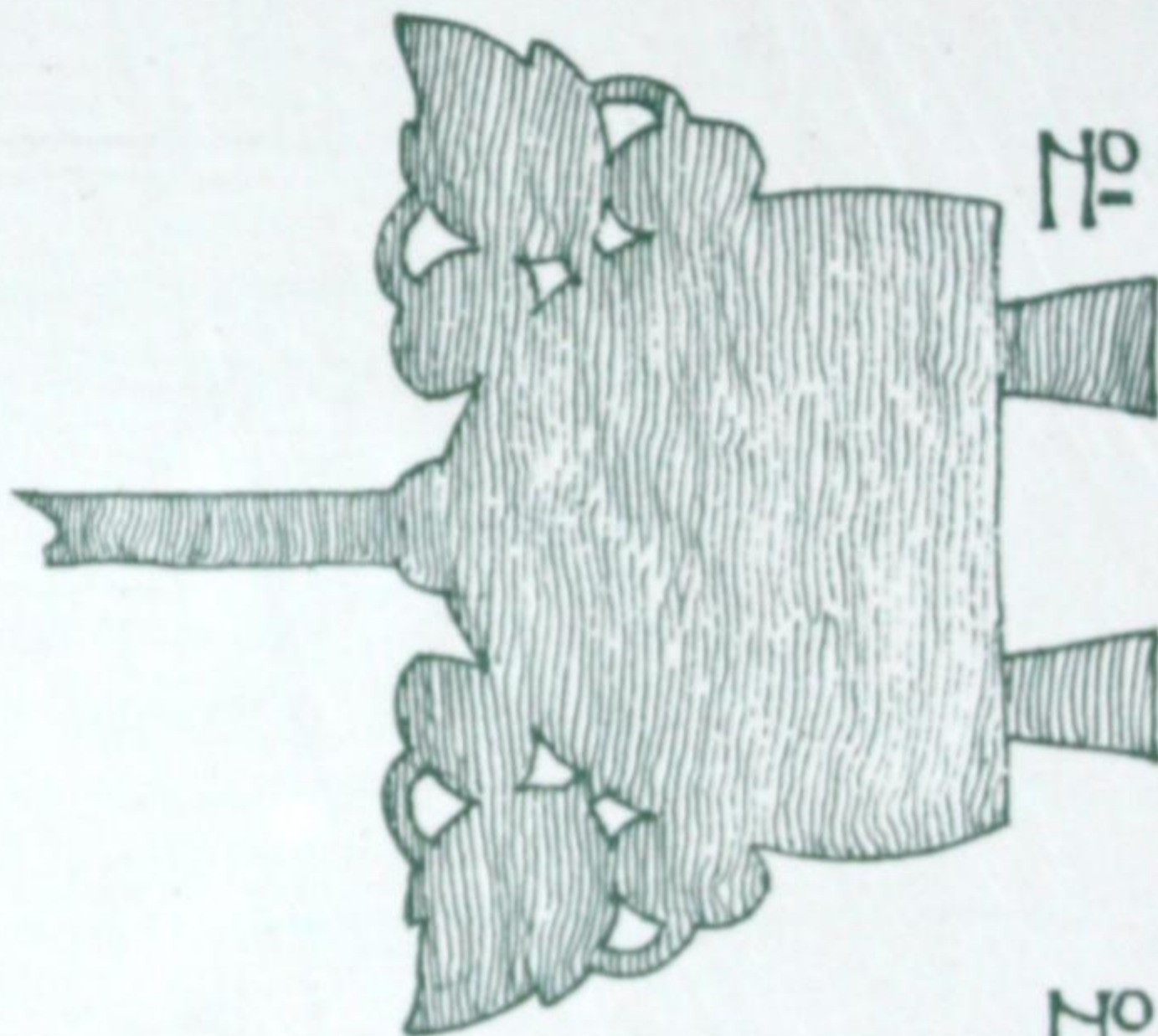


Half full
size ©

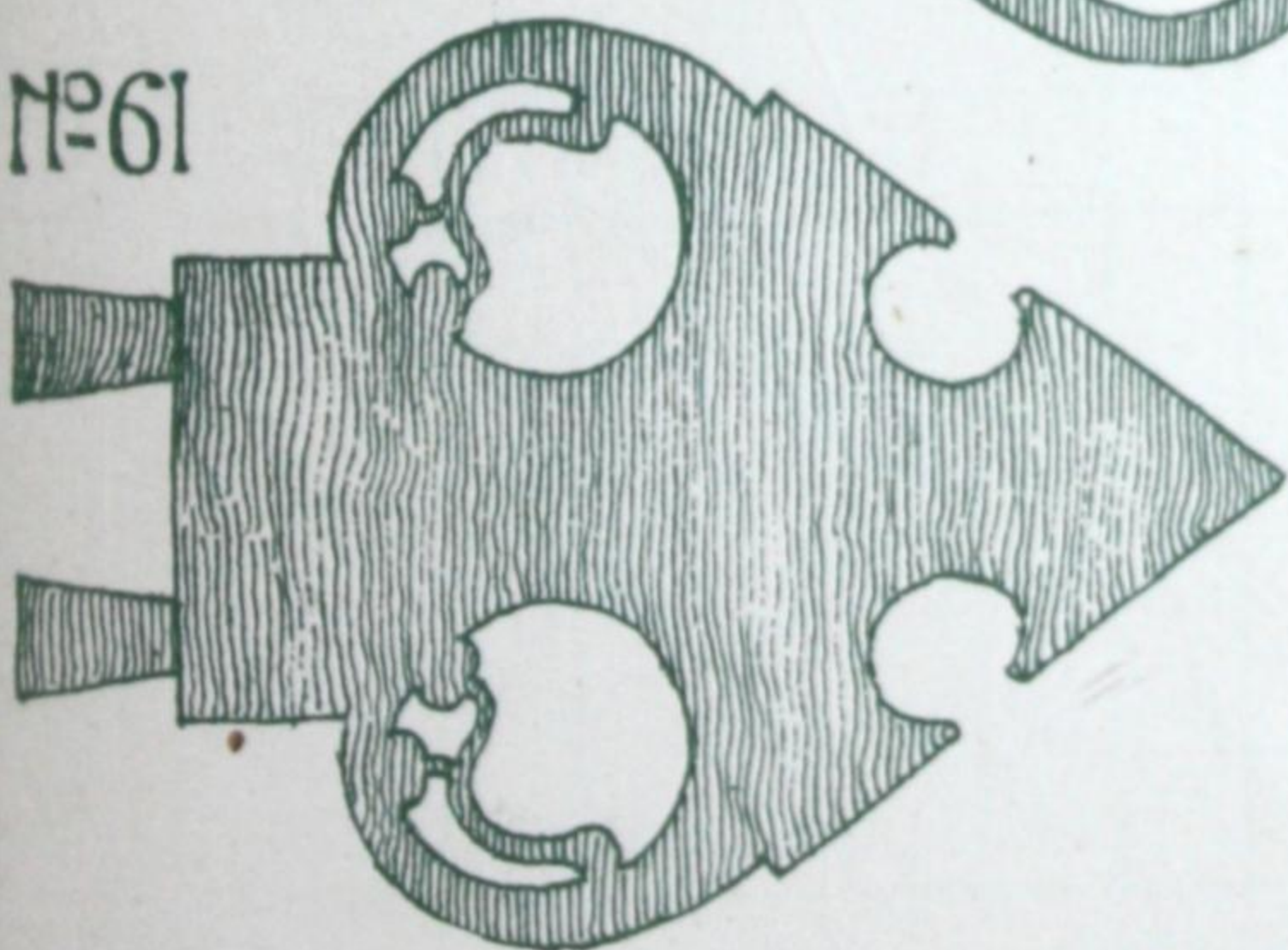
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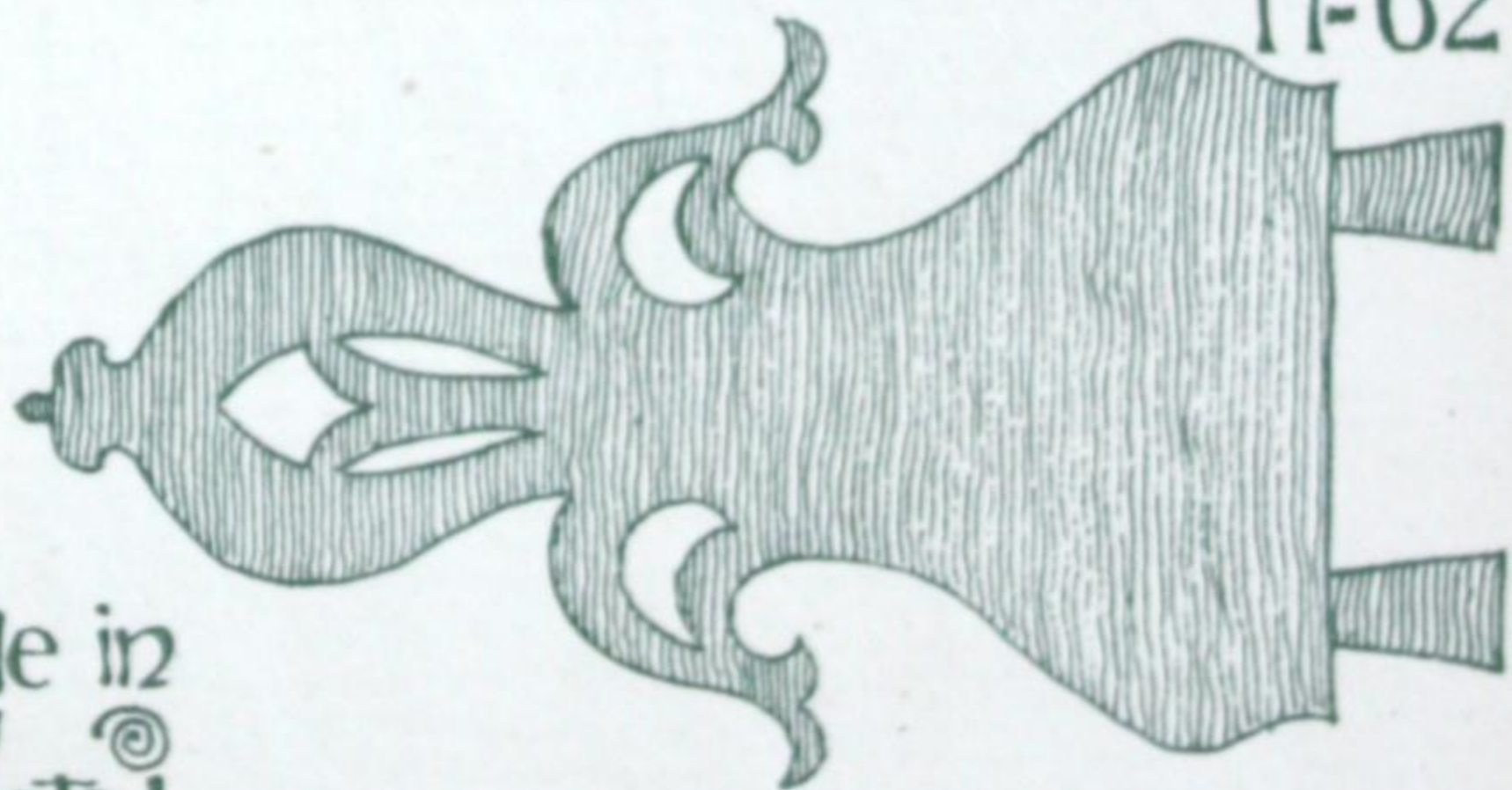
Nº 60



Nº 61

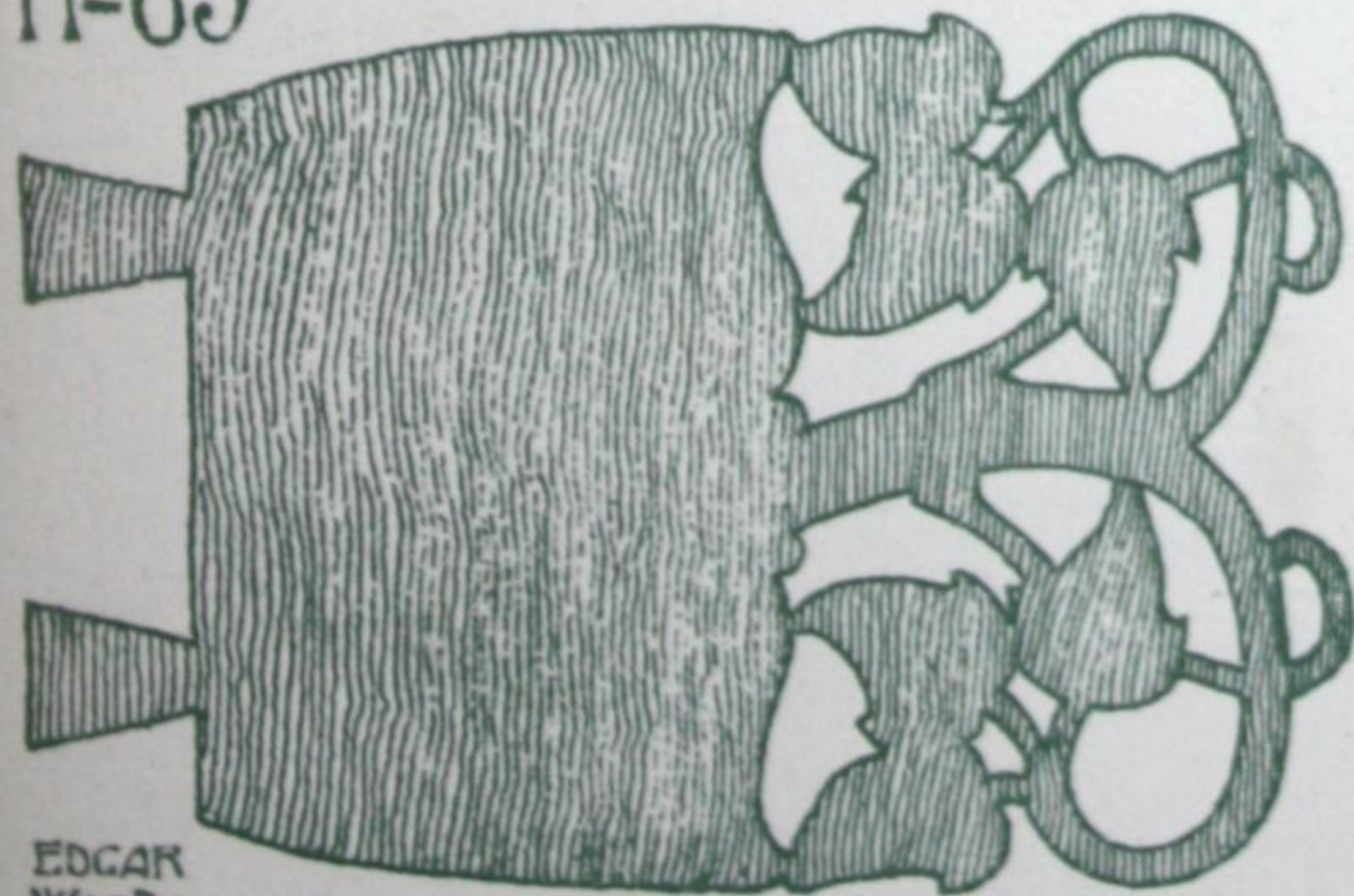


Nº 62

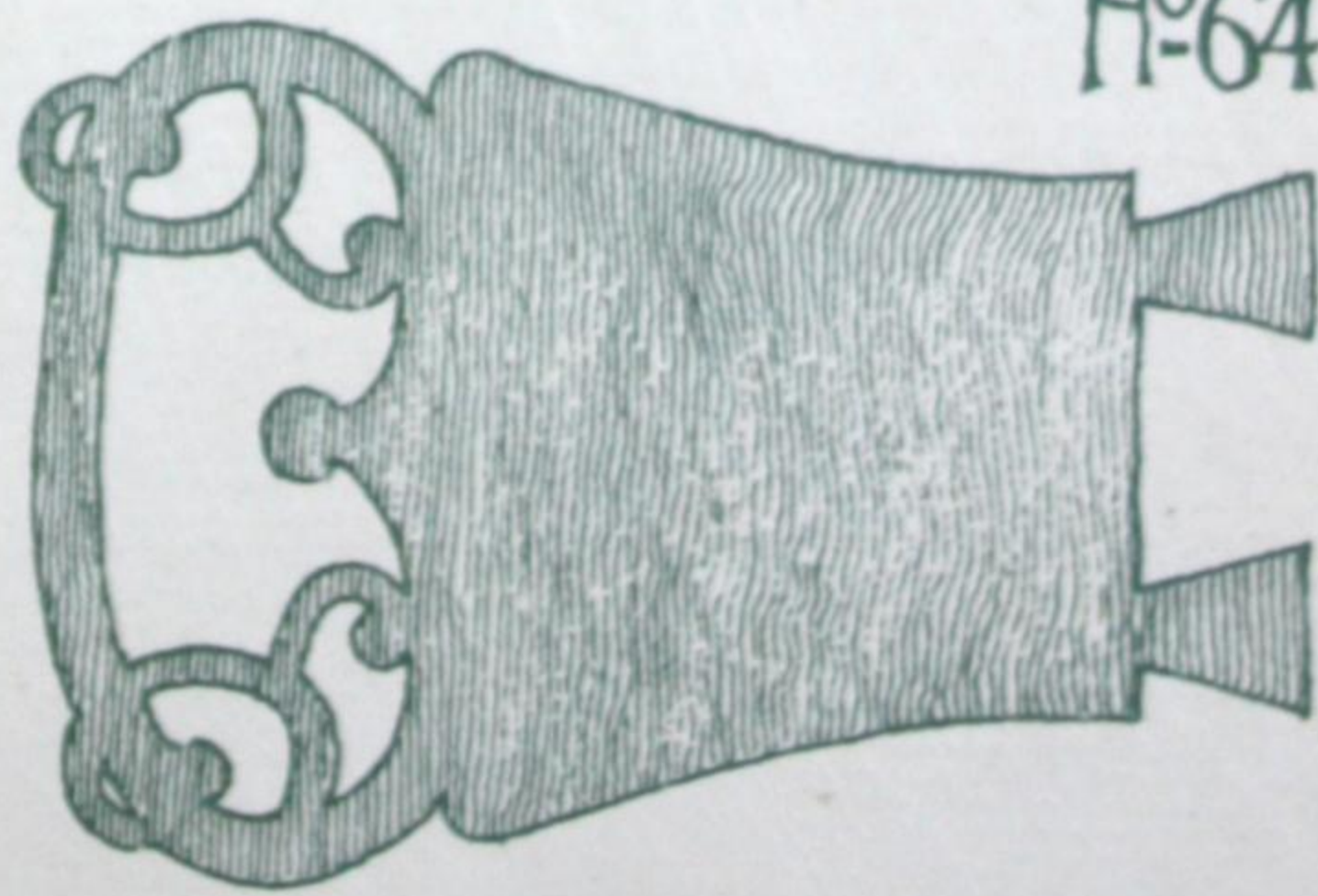


Made in
any ©
metal

Nº 63



Nº 64



GEORGE WRAGGE,

WARDRY METAL WORKS, SALFORD, MANCHESTER.

STAYS FOR METAL & WOOD CASEMENTS

(see opposite page).

When ordering stays for wood casements it is necessary to give the width of the casement and the full size details of the woodwork, both casement and frame; they can be made in other metals than those priced below at proportionate prices.

No. 1, malleable iron, bronzed or dull blacked, fitted up with coinage metal working parts.

No. 2, hammered iron, finished dull bright.

No. 3, coinage metal, plainly filed.

No. 4, coinage metal, polished and toned, or bronzed.

CASEMENT STAYS.																
	1				2				3				4			
Inches ...	10	12	14	16	10	12	14	16	10	12	14	16	10	12	14	16
Nos.																
90	...	...	...	...	14/9	15/-	15/3	16/-	...	...	...	...	...	...	...	...
91	...	...	...	...	12/9	13/-	13/3	14/-	...	...	...	...	...	...	...	...
92	2/6	2/9	3/3	3/6	3/-	3/3	3/9	4/-	3/-	3/6	4/6	5/6	4/-	4/6	5/6	6/6
93	1/9	2/-	2/6	3/-	3/-	3/3	3/9	4/-	2/6	3/-	4/-	5/-	3/6	4/-	5/-	6/-
94	Not made in Malleable or Wrought Iron.								4/6	5/-	6/6	8/-	5/6	6/-	7/6	9/-
95	2/6	2/9	3/3	3/6	3/-	3/3	3/9	4/-	3/6	4/-	5/-	6/-	4/6	5/-	6/-	7/-

NOTE. Cheaper Iron Stays than those priced above can be used of ordinary stock patterns, but they are lighter and have all working parts in iron; they are not recommended.

Special designs will be submitted or quoted for, or architects' own designs will be carried out and reserved if desired.

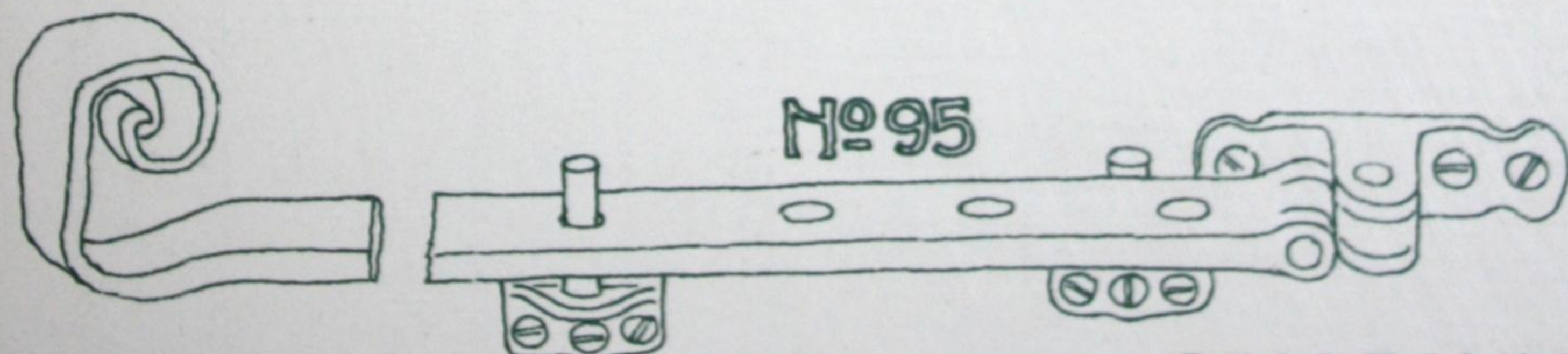
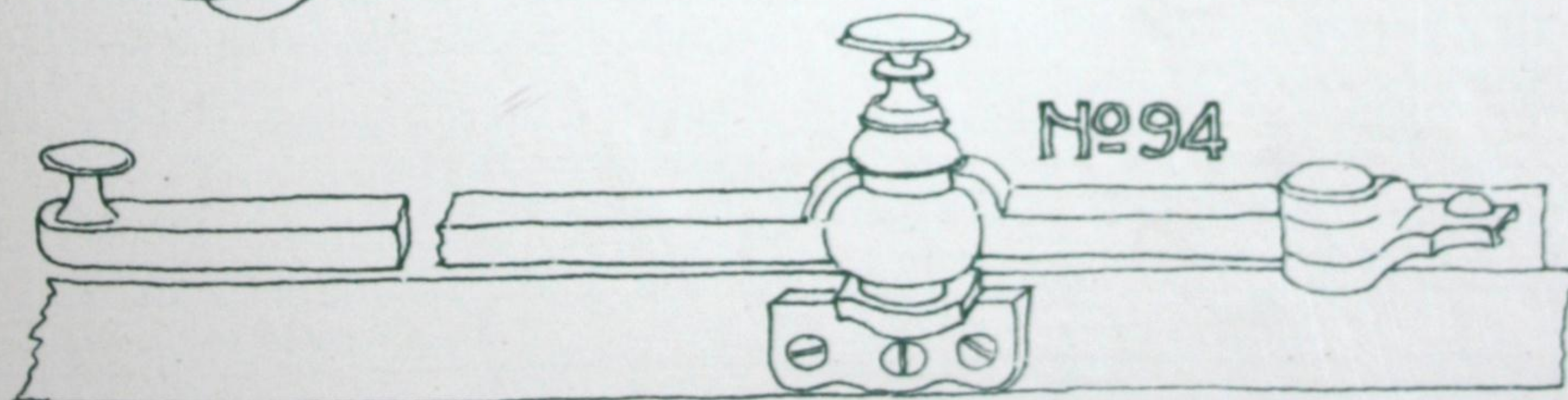
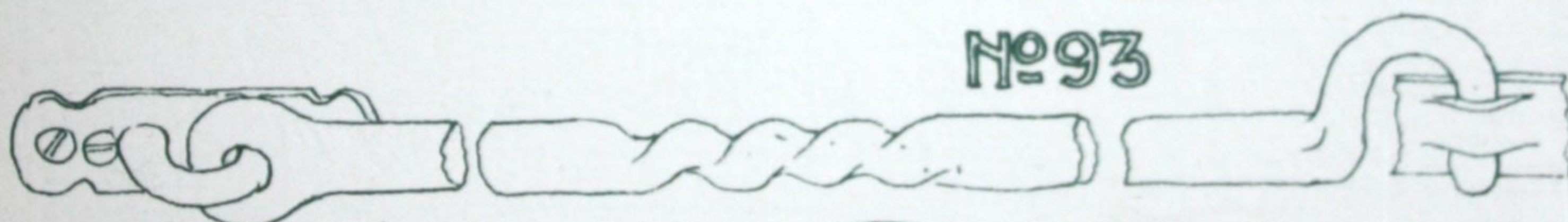
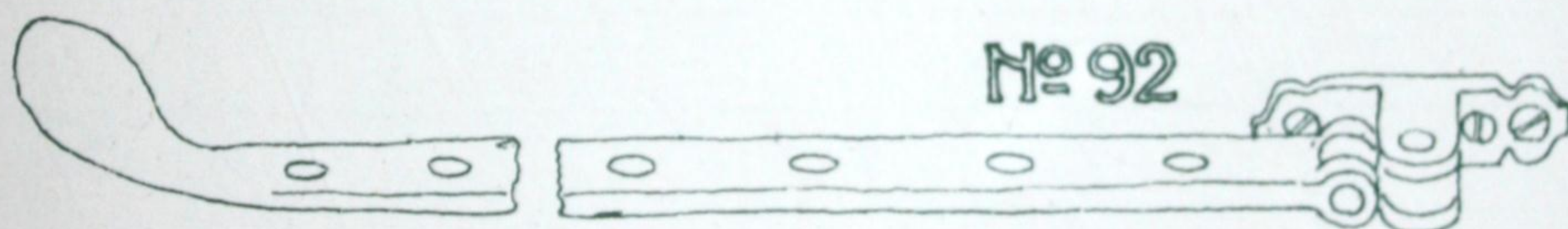
Wardry metal
works Salford
Manchester

GEORGE WRAGGE

22 Surrey St
Strand
London W.C



STAYS AND :
FASTENINGS :
FOR METAL OR
WOOD ~~cases~~
CASEMENTS



DETAILS ABOUT
HALF FULL SIZE

CAN BE MADE IN:
VARIOUS METALS

GEORGE WRAGGE,

WARDRY METAL WORKS, SALFORD, MANCHESTER.

The Elevations on opposite page shew the various Casements illustrated in this Catalogue, and will be found of assistance when ordering. Below is given a list of the pages on which each Casement is drawn in section, with details as to rebates, etc., etc.

No. 2	ELEVATION, opening	OUTWARDS.....	see pages 9, 11, 21, 23, 31
No. 7	do.	do.	INWARDS..... do. 13, 25
No. 5	do.	do.	OUTWARDS IN PAIRS.. do. 19
No. 4	do.	do.	ON CENTRES..... do. 15, 29
No. 6	do.	do.	OUTWARDS FROM HEAD do. 9, 11, 21, 23, 31
No. 9	do.	do.	INWARDS FROM CILL. do. 17, 27

Hopper Casements & Sliding ditto for churches, schools, etc., see opposite page, Elevations Nos. 3, 8 & 12. Fitted with pulleys and eyes to work by cords.

Hopper Casements, either form No. 3 or 8.				Sliding Casements, Elevation No. 12.		
Height.	Width.	No. 13 Sec.	No. 13a Sec.	Height.	Width.	
Under 2ft.	2ft. & under	21/-	18/-	Under 2ft.	2ft. & under	20/-
2ft. & under 2ft. 6	„ „	22/-	19/-	2ft. & under 2ft. 6	„ „	21/-
2ft. 6 „ 3ft.	„ „	23/-	20/-	2ft. 6 „ 3ft.	„ „	22/-
3ft. „ 3ft. 6	„ „	25/-	22/-	3ft. „ 3ft. 6	„ „	24/-

NOTE. Hopper casements, form No. 3, and sliding casements, elevation No. 12, will be fitted with copper casement (or interior frame) at an extra cost, as follows:—Under 2ft. high, 10/-; 2ft. and under 2ft. 6in., 11/6; 2ft. 6in. and under 3ft., 13/6; 3ft. and under 3ft. 6in., 16/6.

POLICE CELL WINDOWS & Outside Grilles ^(see opp. page.), Elevation Nos. 10-11.

These two forms of cell windows have both been made for various Councils in Yorkshire, Cheshire, and other counties. They are both made of 1½ No. 16 section sash bars (see page 53) with double flanged outer frame, No. 18 section, and fitted with wrought iron fillet bars 1in. × ¾in., with lugs to build in 3in. long. The outer grilles are made in wrought iron, having frame and horizontal bars of 3in. × ¾in. section, and verticals of ½in. square, set diagonally, with 3in. lugs to build in.

Cell Windows with Casement, No. 10 Elevation.	Outside grilles divided as windows.	Cell Windows with Casement, No. 11 Elevation.	Outside grilles divided as windows.
2ft. 3in. to crown × 2ft. to spring × 3ft. wide, 55/- each.	40/- each.	1ft. 9in. high × 3ft. wide, 40/- each.	22/6 each.

Special quotation for other forms and sizes.

STABLE SASHES (see opposite page), No. 14. Elevation.

These sashes are strongly recommended, they are made of 1½in. steel sash bar, No. 16 section (see page 53), to glaze inside and fitted with hopper casement with solid side checks (to prevent draught) having coinage metal hook spring catch. 2ft. 6in. high × 3ft. wide in 12 squares, at 32/-; EXTRA: if galvanised 8/- each.

Special quotation for other forms and sizes.

VERTICAL CENTRE HUNG CASEMENTS (see Elevation No 1).

Made in two sections and two qualities.

No. 1 QUALITY Casements are fitted with coinage metal handle No. 84 (see page 37), and stay with 2 pins No. 92 (see page 47), plainly filed, and hung on coinage metal centres.

No. 2 QUALITY Casements have similar fittings, but in malleable iron.

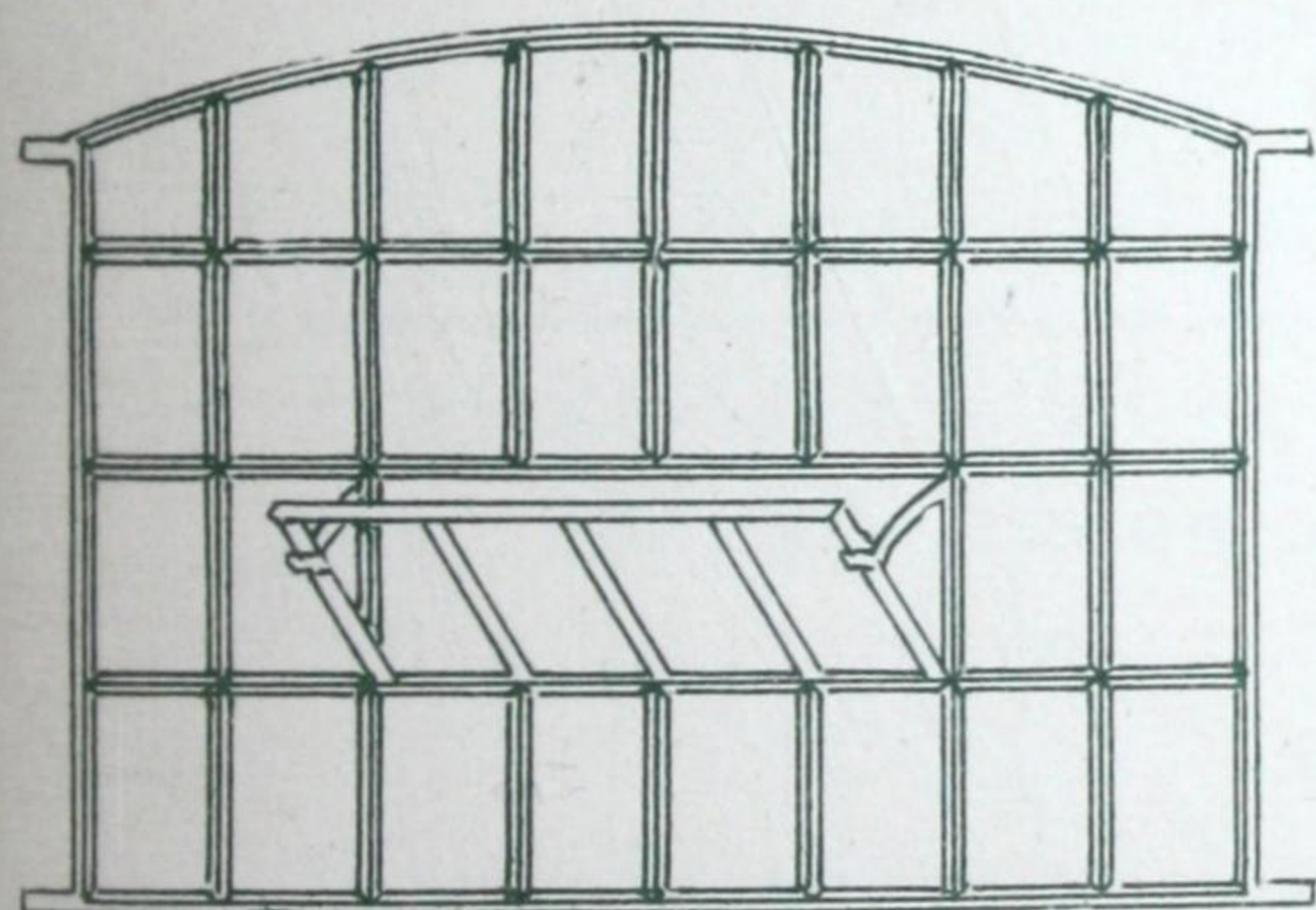
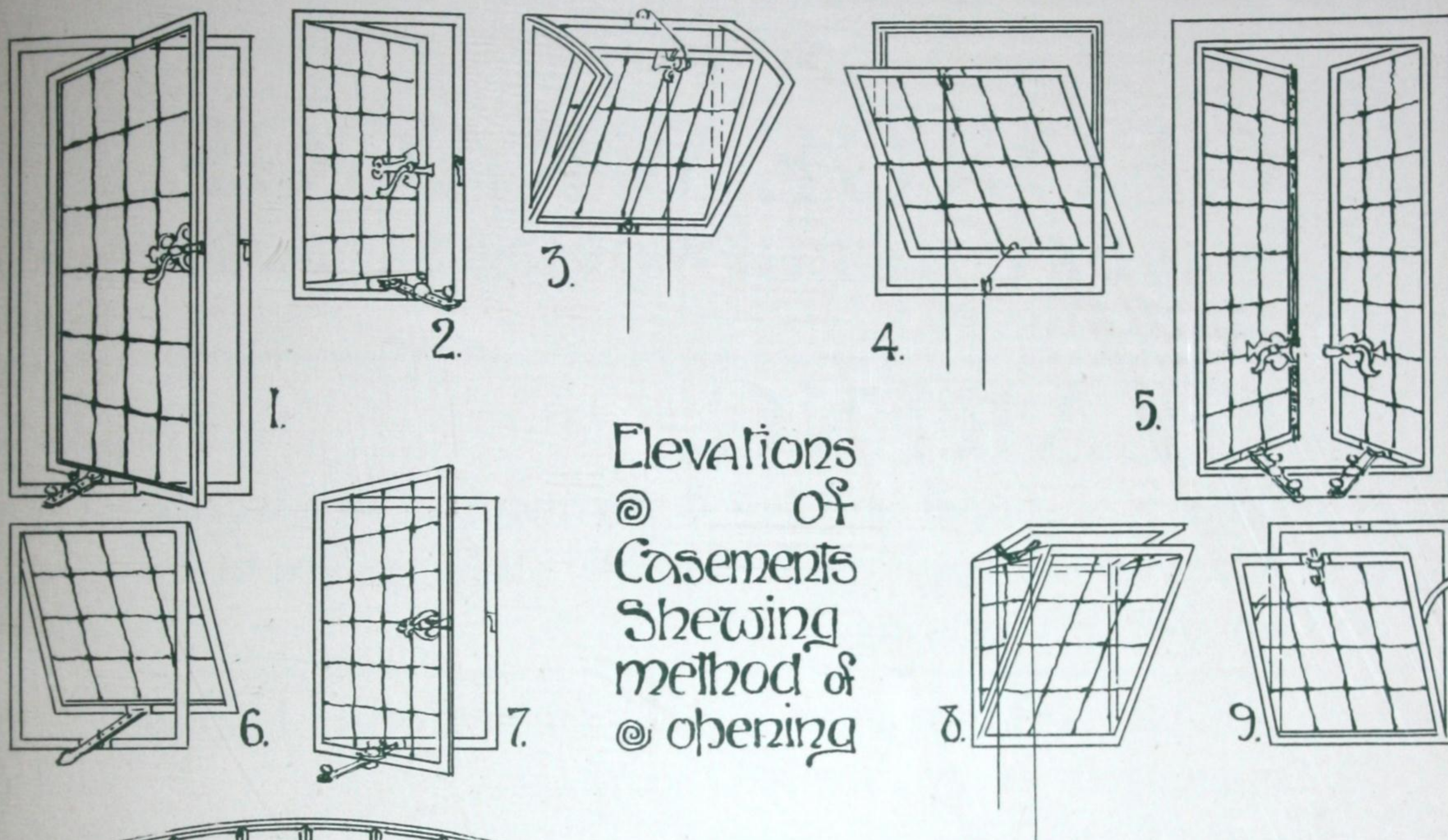
Vertical centre hung Casements (see Elevation No. 1, opposite page).					
Section No. 12, page 28.				Section No. 22, page 14.	
Height.	Width.	Quality 1.	Quality 2.	Quality 1.	Quality 2.
2ft. and under -	2ft. & under	35/-	34/-	55/-	54/-
Over 2ft. & under 2ft. 6	„ „	37/-	36/-	57/-	56/-
2ft. 6in. and under 3ft.	„ „	39/-	38/-	59/-	58/-
3ft. and under 3ft. 6in.	„ „	41/-	40/-	61/-	60/-
3ft. 6 and under 4ft. 6	„ „	44/-	43/-	64/-	63/-
4ft. 6in. and under 5ft.	„ „	...	...	75/-	72/6
5ft. to 6ft. -	„ „	...	...	82/6	80/-

NOTE. Casements 4ft. 6in. and upwards are fitted with slide bolt fastenings as described on page 7 to Nos. 2 and 3 quality casements. Prices of Louvre lights, as Elevation 13, on application. For complete list of EXTRAS, see page 34. For designs of FITTINGS, see pages 37 to 47.

Wardry metal
works Salford
Manchester

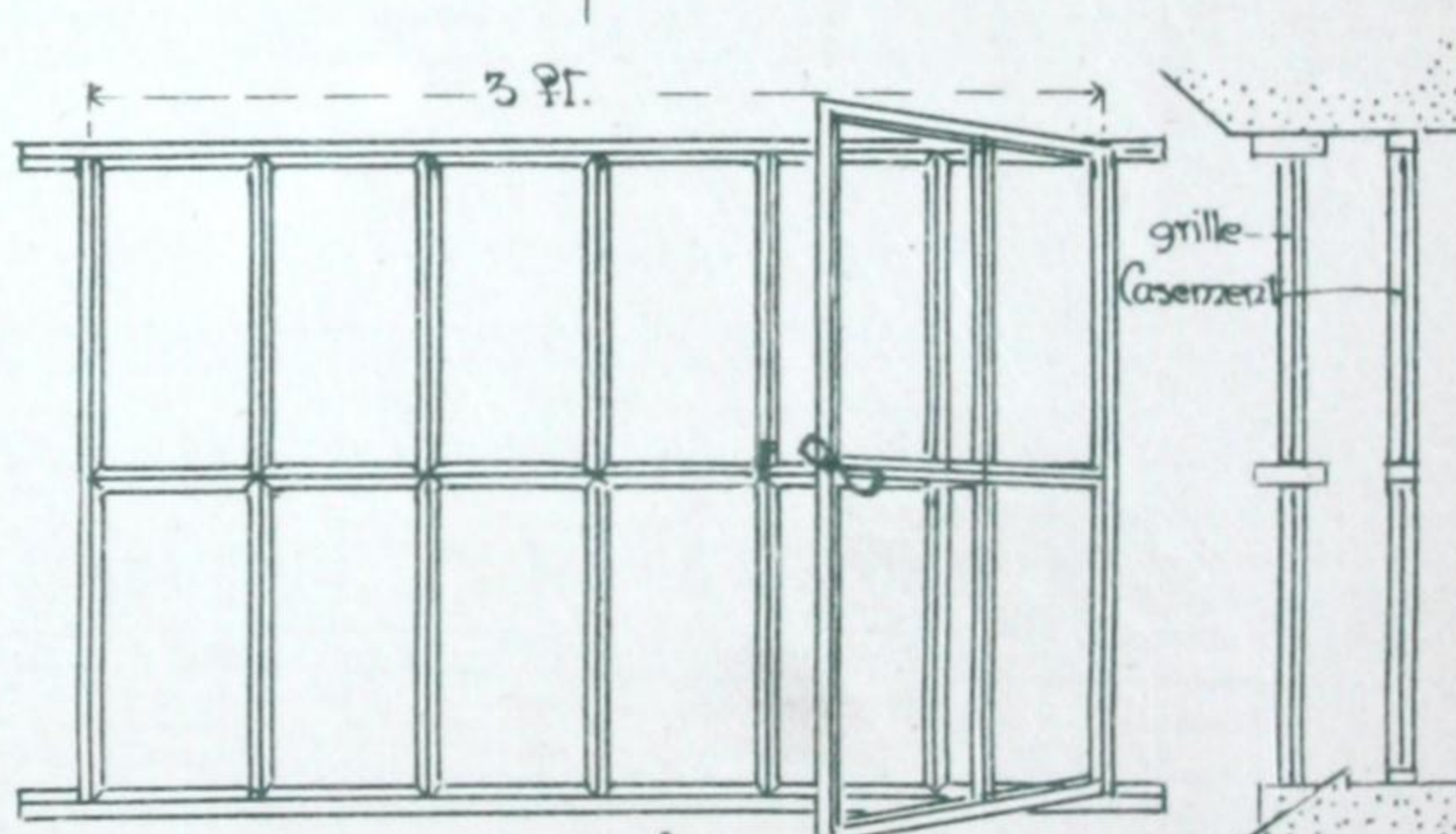
GEORGE WRAGGE

22 Surrey St
Strand
London W.C



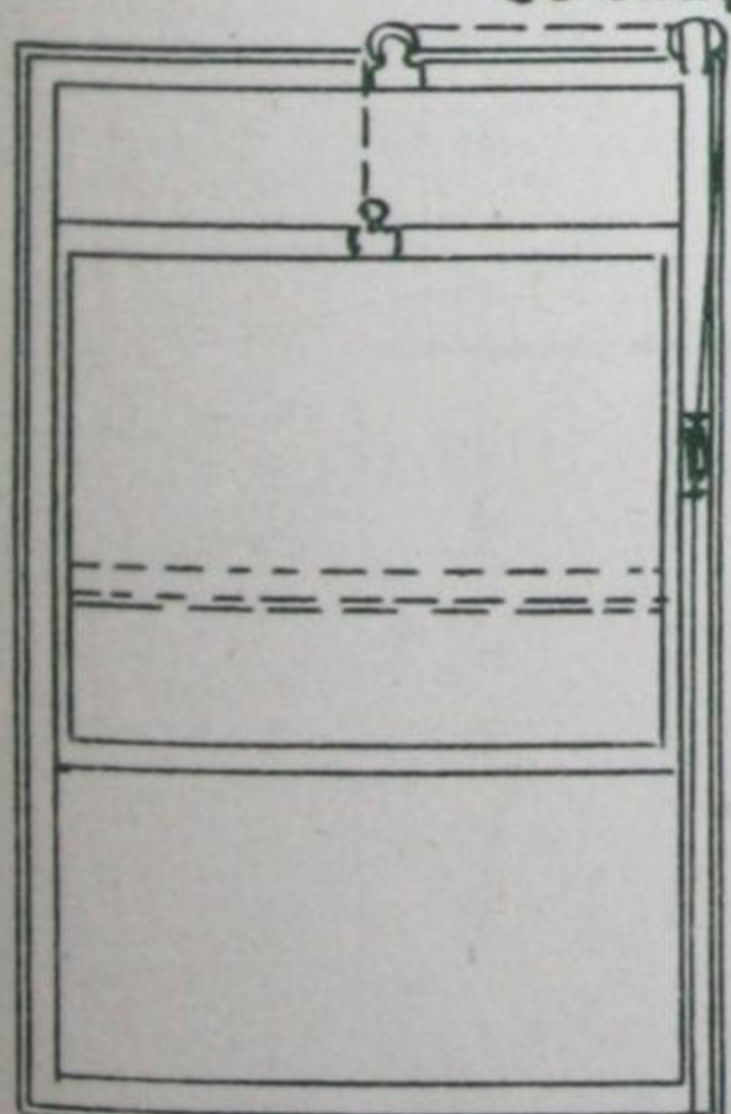
10. Police Cell Window as made for various County Councils

inch scale



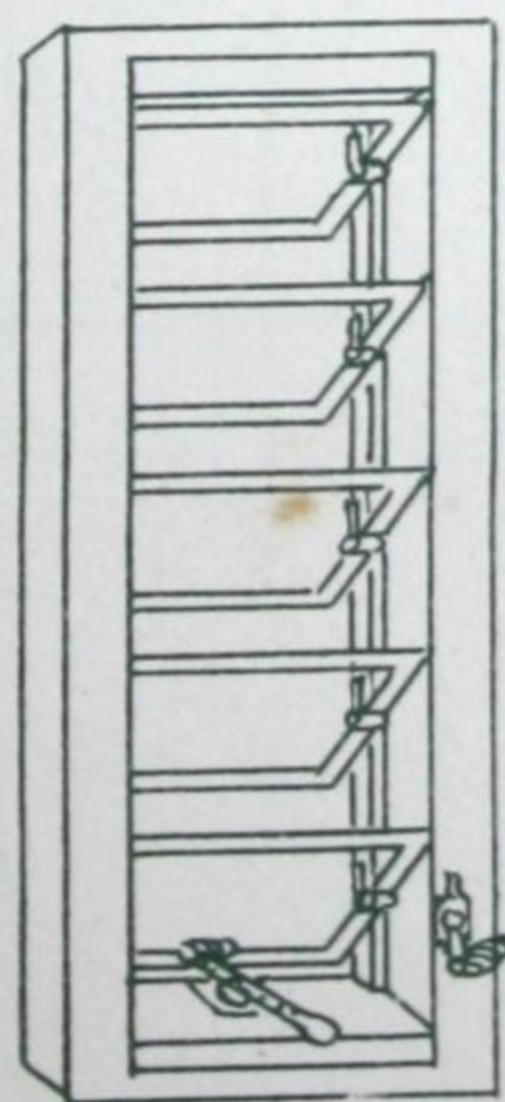
Police Cell Window as adopted by many County Councils

11.



Sliding Sash

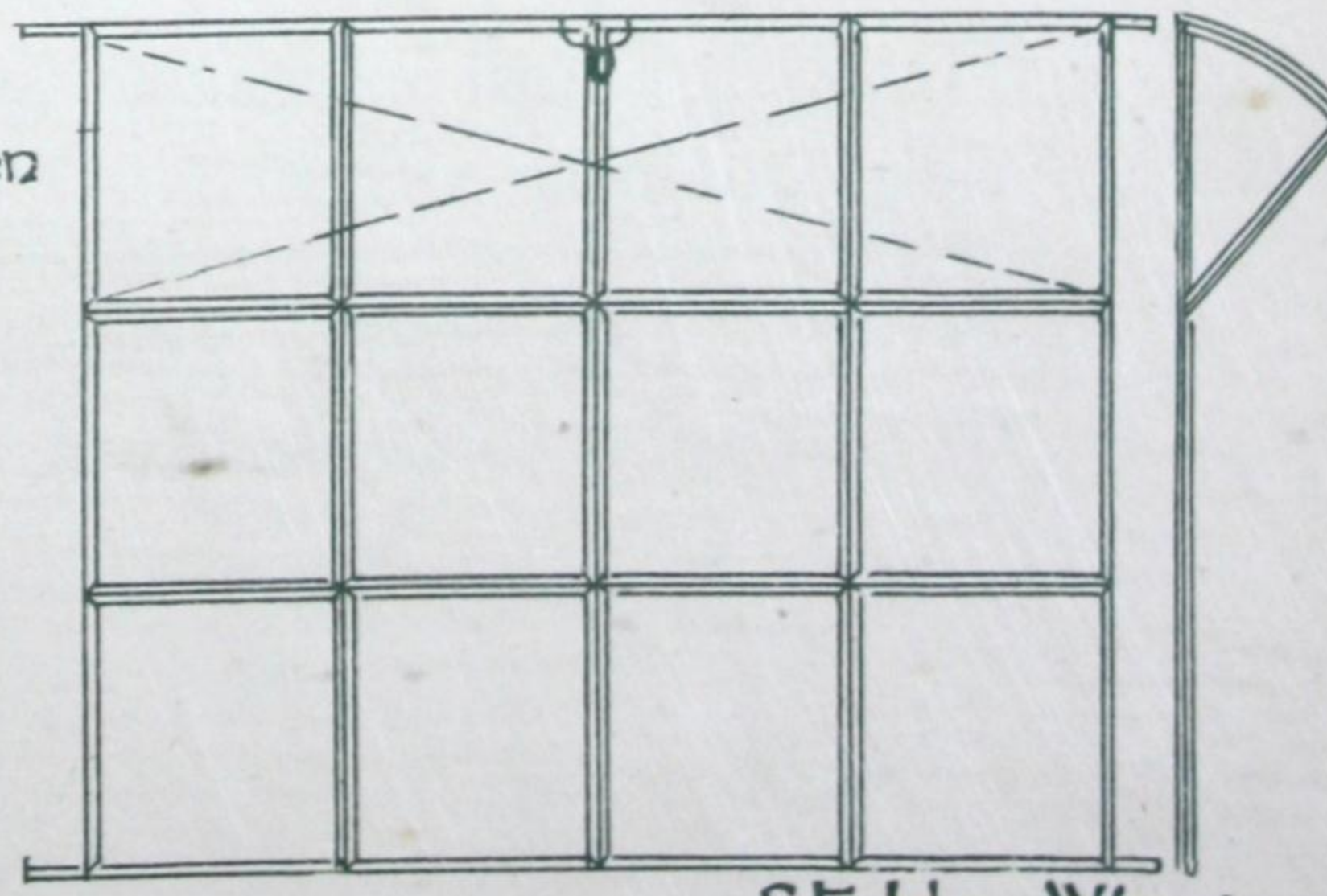
12.



Fever Hospital window with secret opening gearing

13.

to open



inch scale

14.

Stable Window with Hopper vent galvanized

GEORGE WRAGGE, WARDRY METAL WORKS, SALFORD, MANCHESTER.

GEARING.

This is a special and big department at my works. Many of the large modern public buildings are fitted up with my gearing.

GEARING for ranges of Lantern and other Lights opening in every form,
GEARING for Fanlights,
and suitable for Metal or Wood Casements.

All vertical and horizontal rods are of PLANISHED STEEL, while the arms, brackets, guides, &c., &c., are of malleable iron, carefully machined and fitted, all joints being rivetted with BRONZE pins.

The regulators are of coinage metal, with specially hard metal cogs and working parts, while the ends of vertical rods are lathe-cut, square-threaded, of quick pitch.

Drawings and estimates submitted on receipt of specification and quantities.

NOTE. The patent gearing of other makers will be fitted to our metal casements if desired.

SASHES.

.....
IN WROUGHT STEEL, IRON,
& GUN METAL.
.....

See other side for full description.

GEORGE WRAGGE, WARDRY METAL WORKS, SALFORD, MANCHESTER.

SECTIONS OF WROUGHT STEEL & IRON SASHES.

WROUGHT SASHES are now used almost exclusively in place of Cast.

They are invariably cheaper.

They take up less daylight.

They can be better adapted to varying sizes and shapes.

They do not break through settlement of building.

The opening lights can be better fitted.

All joints are mitred by machinery (see page 55), and are interlaced. Any form of Casement shewn in this Catalogue can be fitted to these Sashes.

Any shape of window can be made (see page 55).

Quick delivery can be given (from 5,000 to 10,000 superficial feet of these Sashes are sent out WEEKLY).

The bulk of the sections illustrated on opposite page are kept in stock; in many cases the rolls are my own property (thereby ensuring well-rolled material), and some of the sections are registered.

Rolls will be turned for special sections.

All material for these Sashes and Casements is English rolled.

For prices see page 54.

Wardry metal
works Salford
Manchester

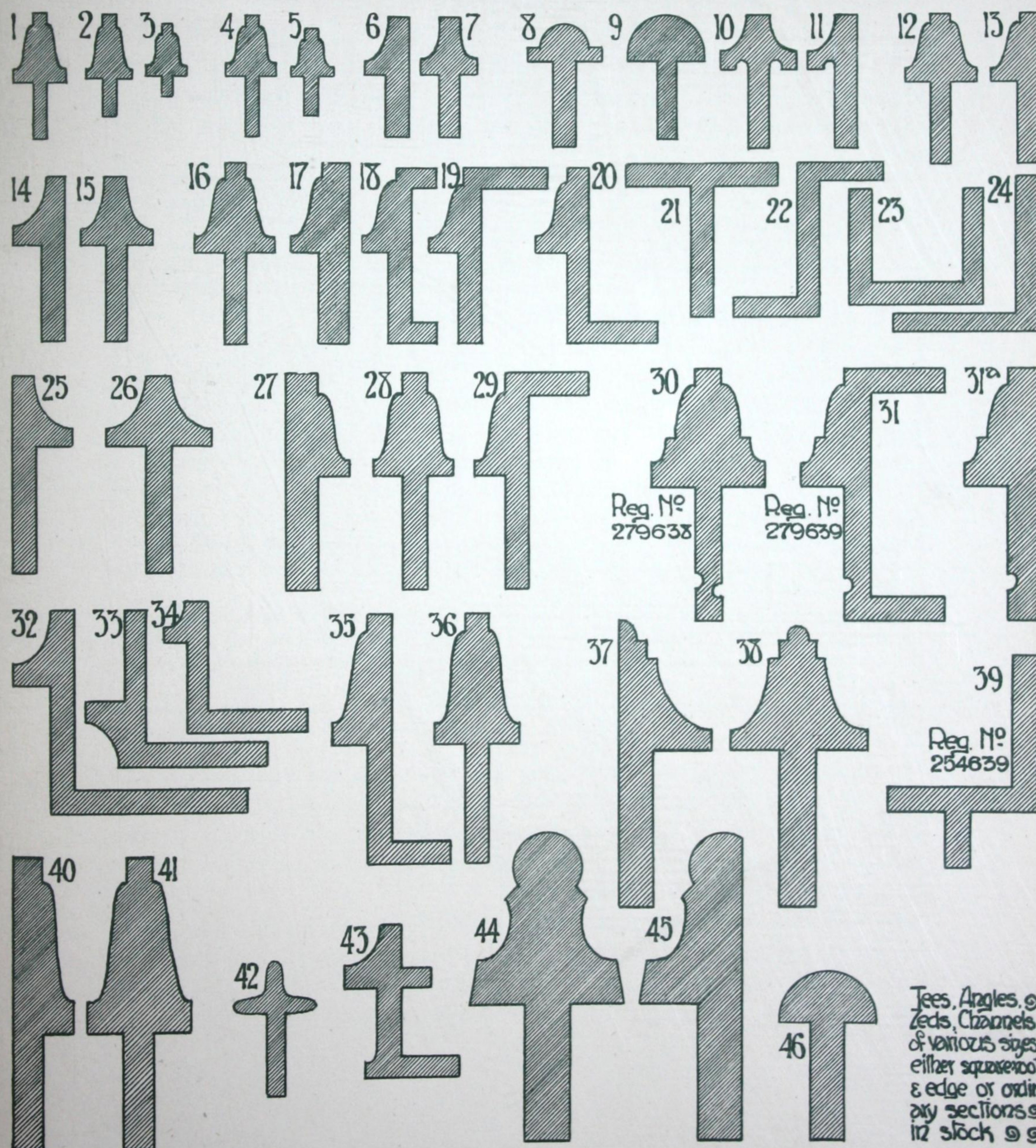
GEORGE WRAGGE

22 Surrey St
Strand
London W.C

Rolls Turned
for special
sections :

Wrot Steel
and iron
sections
for window
frames ☉

Full size ☉
☉ details



GEORGE WRAGGE,

WARDRY METAL WORKS, SALFORD, MANCHESTER.

It is desired that a specification and set of quantities be sent for special quotation. Owing to the varying sizes, sections, forms of casements, and area of the panes, it is impossible to give a complete price list. The prices given below will however be a guide.

The larger the area of sash and the fewer the panes, the lower the price; they have been made frequently as low as 5d. per sup. foot (see below) 10ft. x 8ft., in 16 squares.

Sashes similar to elevation No. 15 (opposite page) but with square head and without casement.	Sections Nos. 10 & 11. 1 $\frac{1}{8}$ in.	Sections Nos. 16 & 17. 1 $\frac{1}{2}$ in.	Sections Nos. 30 & 31a. 2 in.
	per sup. foot.	per sup. foot.	per sup. foot.
4ft. high x 2ft. 6in. wide in 4 sqrs.	11d	1/-	
4ft. high x 2ft. 6in. wide in 6 sqrs.	1/-	1/1 $\frac{1}{2}$ d	
6ft. high x 4ft. wide in 12 squares	8d	9 $\frac{1}{2}$ d	1/1
6ft. high x 4ft. wide in 16 squares	10d	10 $\frac{1}{2}$ d	1/2 $\frac{1}{2}$
8ft. high x 5ft. wide in 12 squares		6 $\frac{1}{2}$ d	9d
8ft. high x 5ft. wide in 20 squares	This section is not recommended for sashes of larger area than say 30 feet sup.	8 $\frac{1}{2}$ d	11d
10ft. high x 8ft. wide in 16 squares		5d	7d
10ft. high x 8ft. wide in 30 squares		6 $\frac{1}{2}$ d	8 $\frac{1}{2}$ d

NOTE. The superficial area is calculated by measuring the extreme height by the width (exclusive of lugs).

In ordering it is necessary to state whether to glaze from outside or inside; if the latter method is adopted re-glazing can be inexpensively done. In all cases the sashes are drilled for pegs to hold glass in position until the mastic sets (whether glazing inside or out).

EXTRAS.

Casements to swing on centres, say 2ft. square, fitted with pulleys and eyes for cords, from 12/6, each according to section of bar. Casements to fall back from cill, from 15/6 each. Casements can be made to take out for cleaning purposes. Special quotation will be given on receipt of specification and quantities.

NOTE. Rod or other gearing can be fitted to these casements (see page 50).

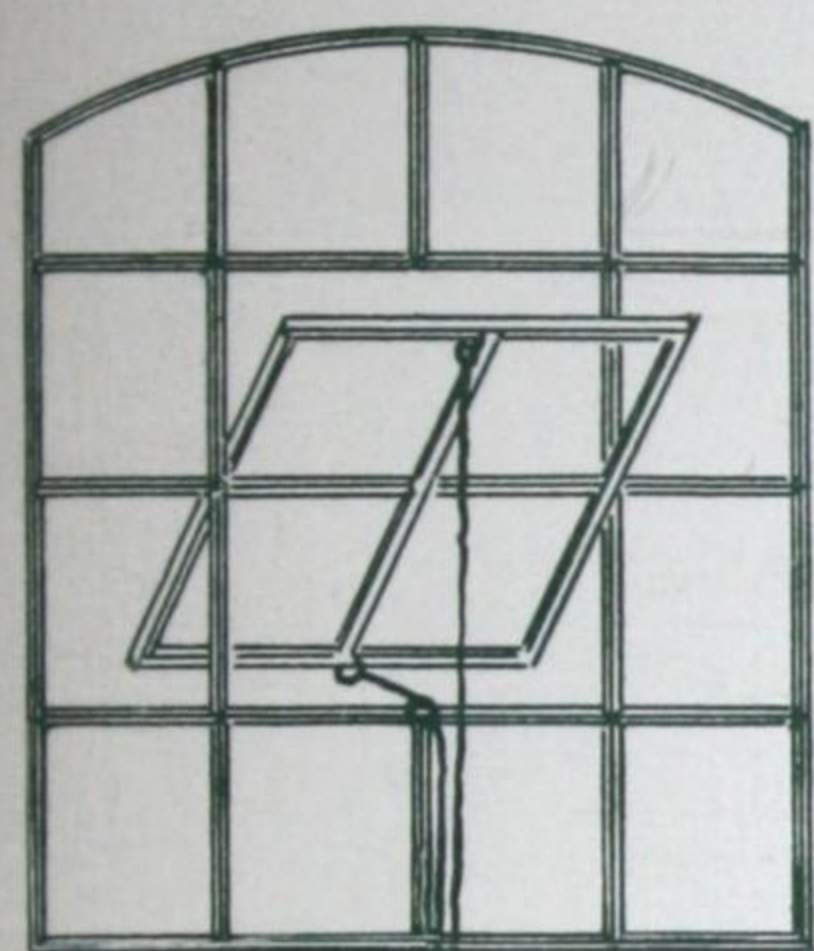
Segmental or semi-circular heads to sashes of sections up to and including 1 $\frac{1}{2}$ in. and up to 4ft. 6in. wide, 2/6 each; if of 2in. section, 3/-; if over 4ft. 6in. wide, up to say 8ft., 3/6 and 4/6 respectively.

Wardry metal
works Salford
Manchester

GEORGE WRAGGE

22 Surrey St
Strand
London W.C

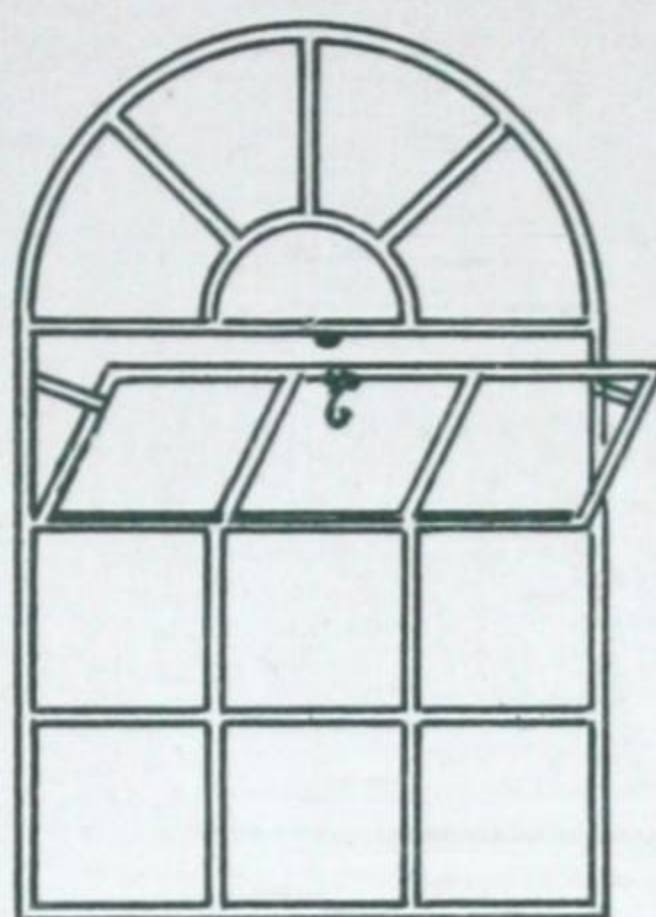
Some forms of
windows in wrought
steel with mitred joints
and in cast iron



15



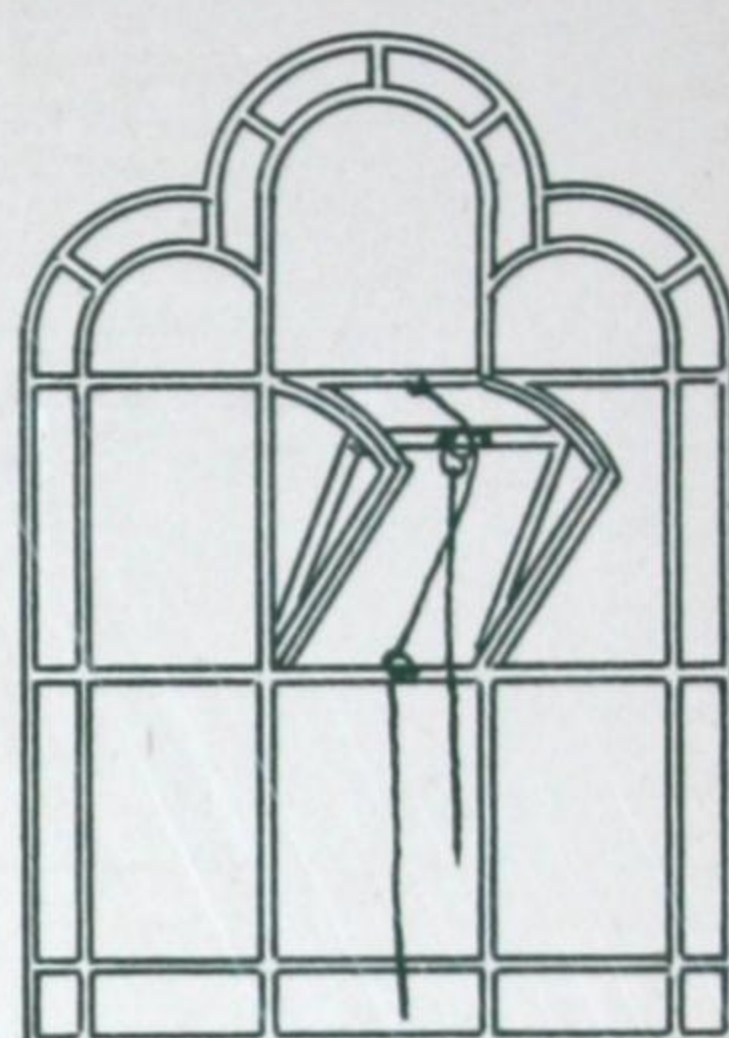
16



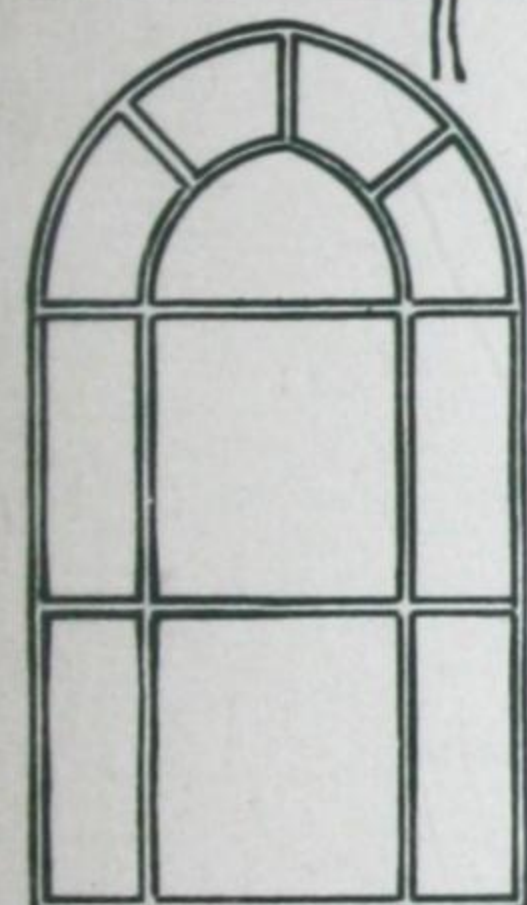
17



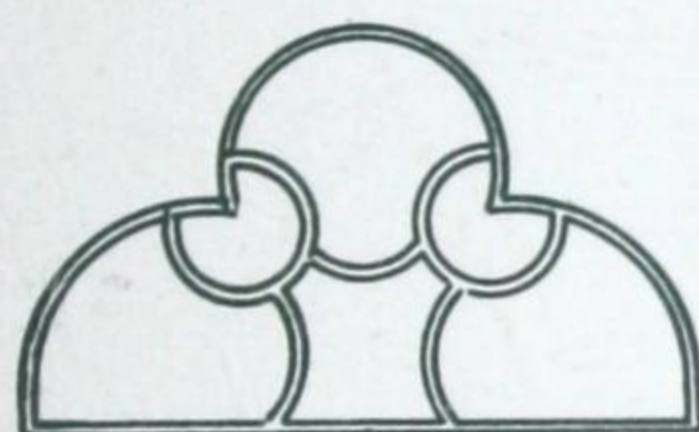
18



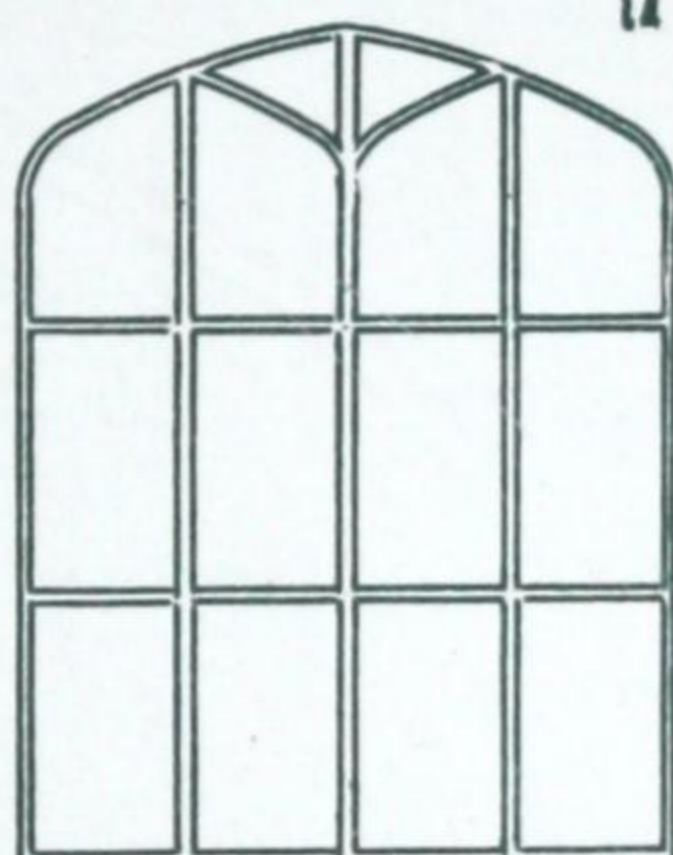
19



20



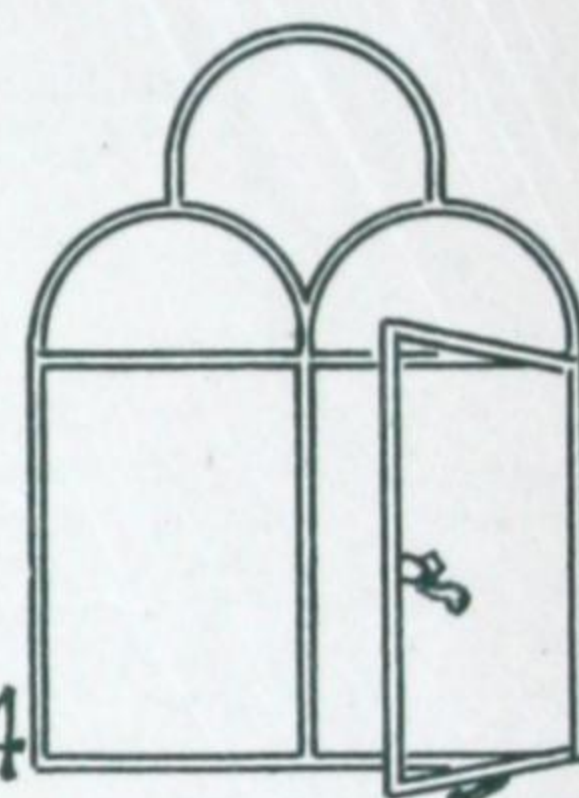
21



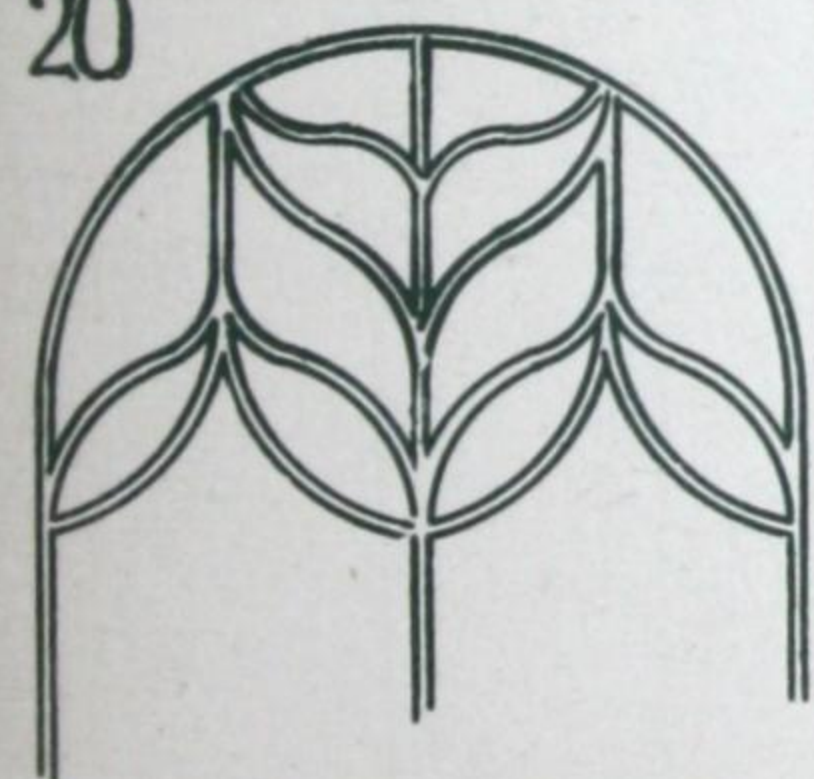
22



23

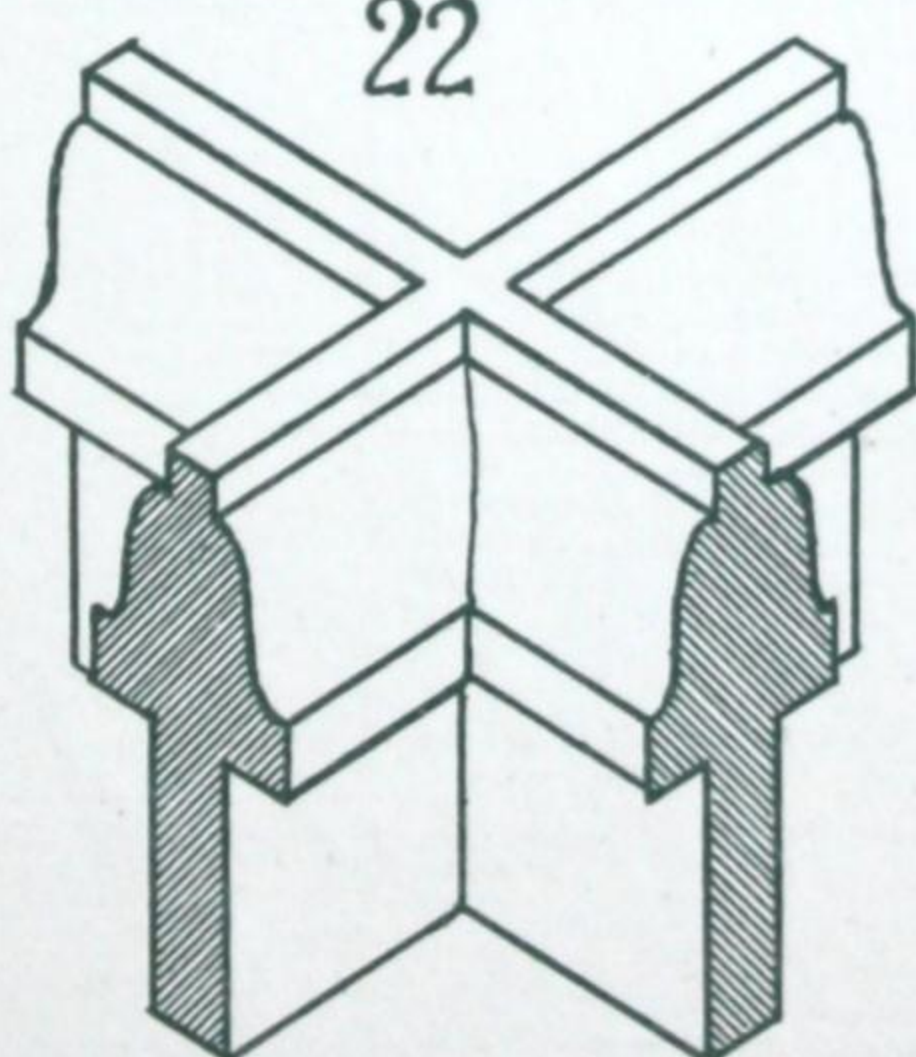


24



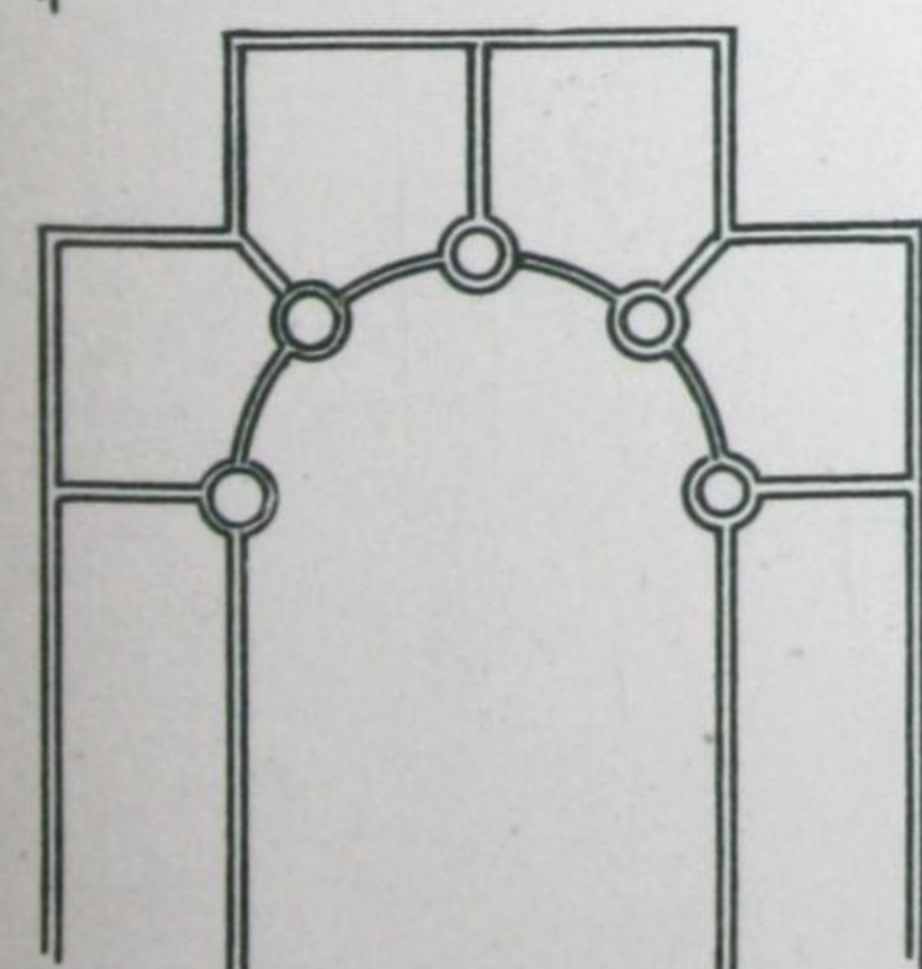
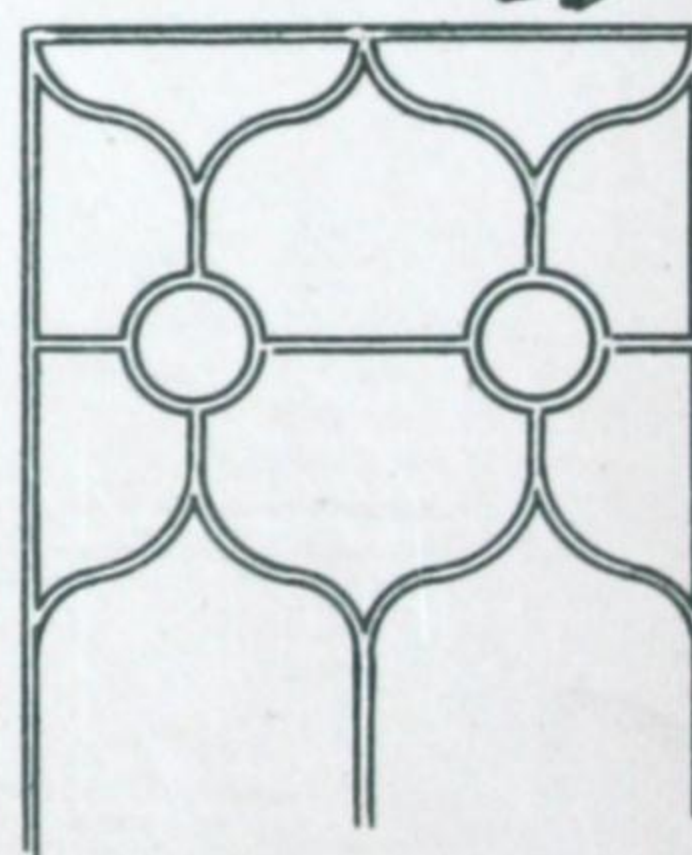
25

Section
full size

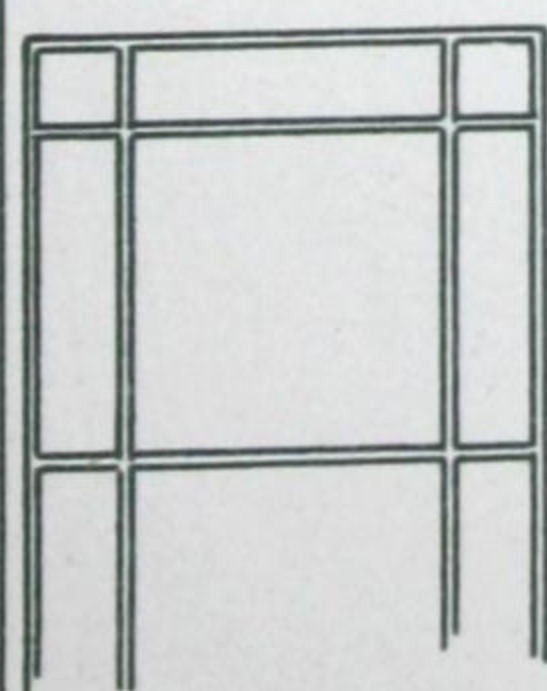


Shewing
how a
joint
is formed

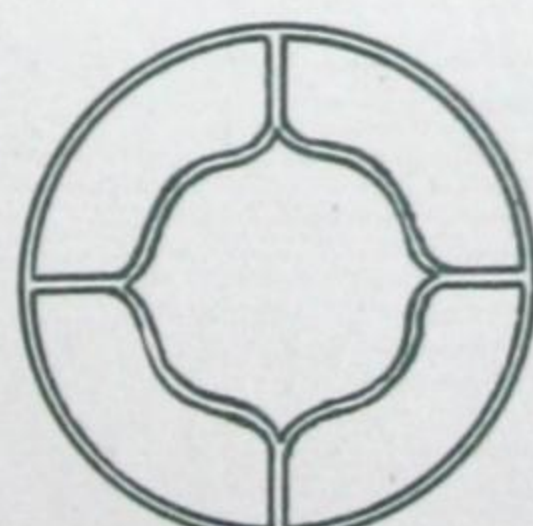
26



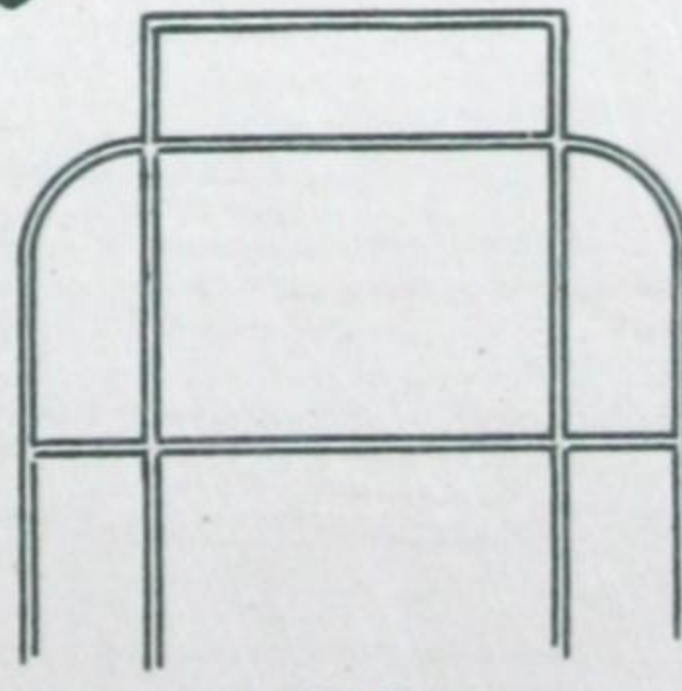
27



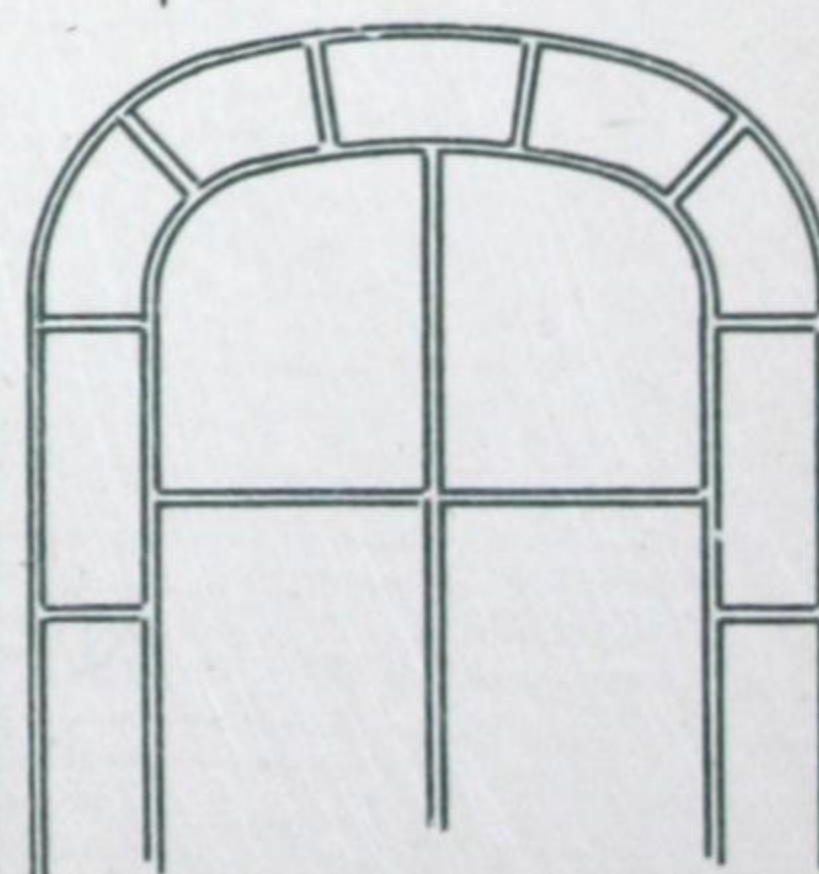
28



29



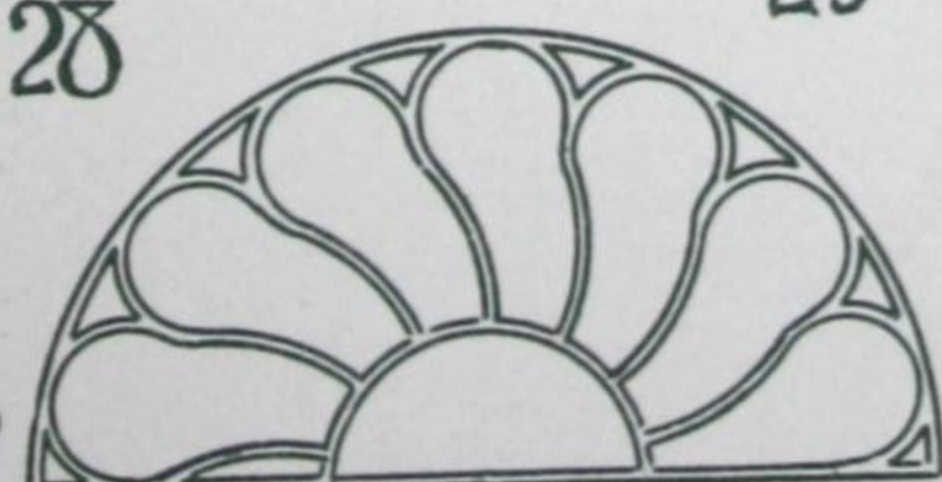
30



31

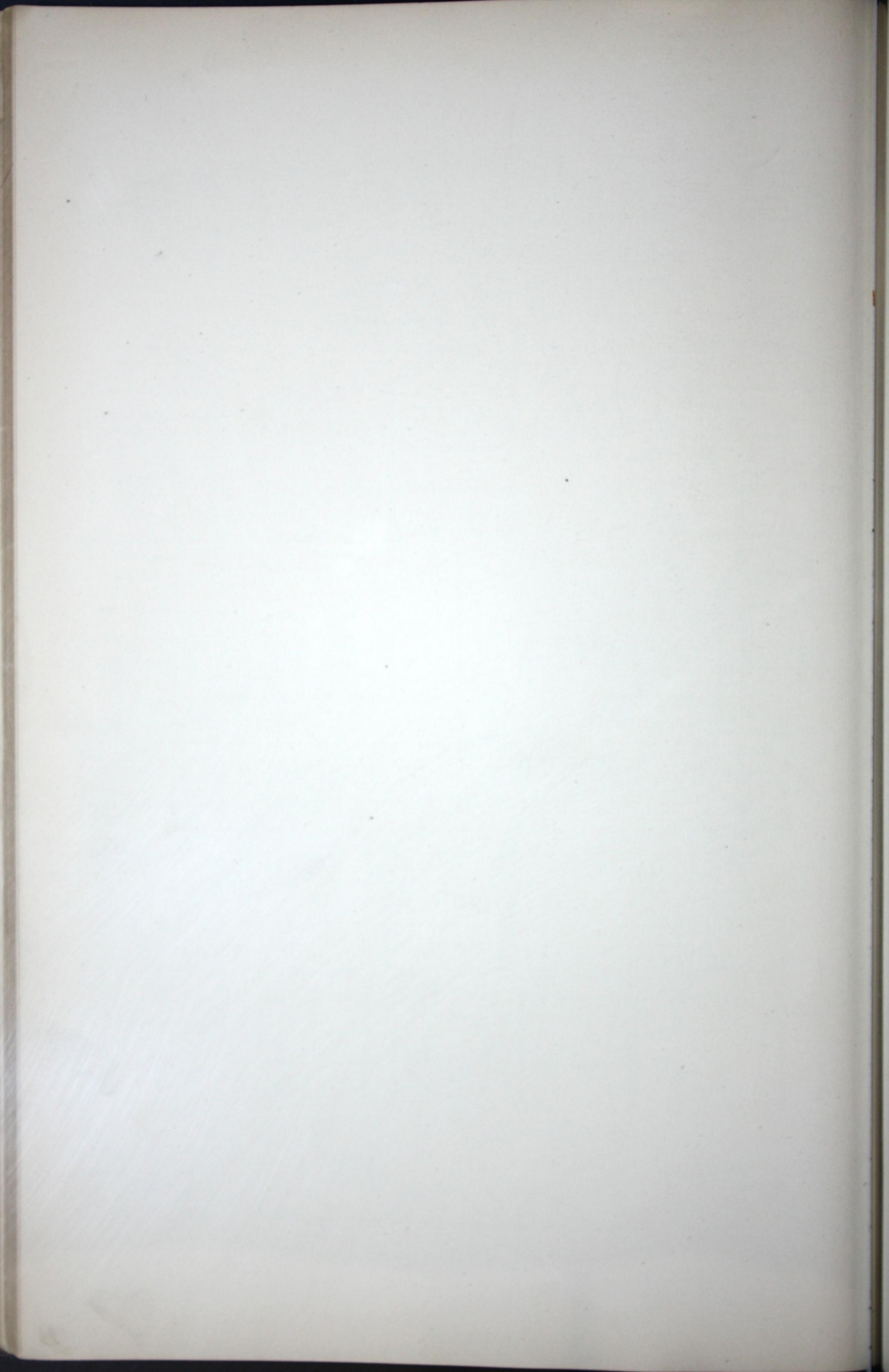
Special Quotations
on receipt of
specifications
and quantities

32



33

Any form of
opening casements
can be fitted to
these frames



METAL WORK.

In iron, copper, brass, bronze, aluminium, &c., &c.,
Hammered or Cast.

Designs & prices will be posted on application.

.....

Gates & Grylles.	Chancel Screens.
------------------	------------------

Vanes & Terminals.	Altar Rails & Standards.
--------------------	--------------------------

Balustrades & Newels.	Lecterns, Reading Desks.
-----------------------	--------------------------

Hinges & Door Furniture.	Font Covers.
--------------------------	--------------

Hanging Signs & Boards.	Communion Plate.
-------------------------	------------------

Dog Grates.	Lamps & Candlesticks.
-------------	-----------------------

Fenders & Irons.	Ecclesiastical Door Fittings.
------------------	-------------------------------

&c., &c.	&c., &c.
----------	----------

.....

Repoussé Work in pewter, lead, copper, &c.

Memorial Tablets & Engraved Plates.

.....

Gas & Electric Light Fittings,

In brass, copper, aluminium, iron, &c.

.....

LEADED LIGHTS.

Specimens, designs & prices on application.



GEORGE WRAGGE

Wardro metal
works Salford
Manchester



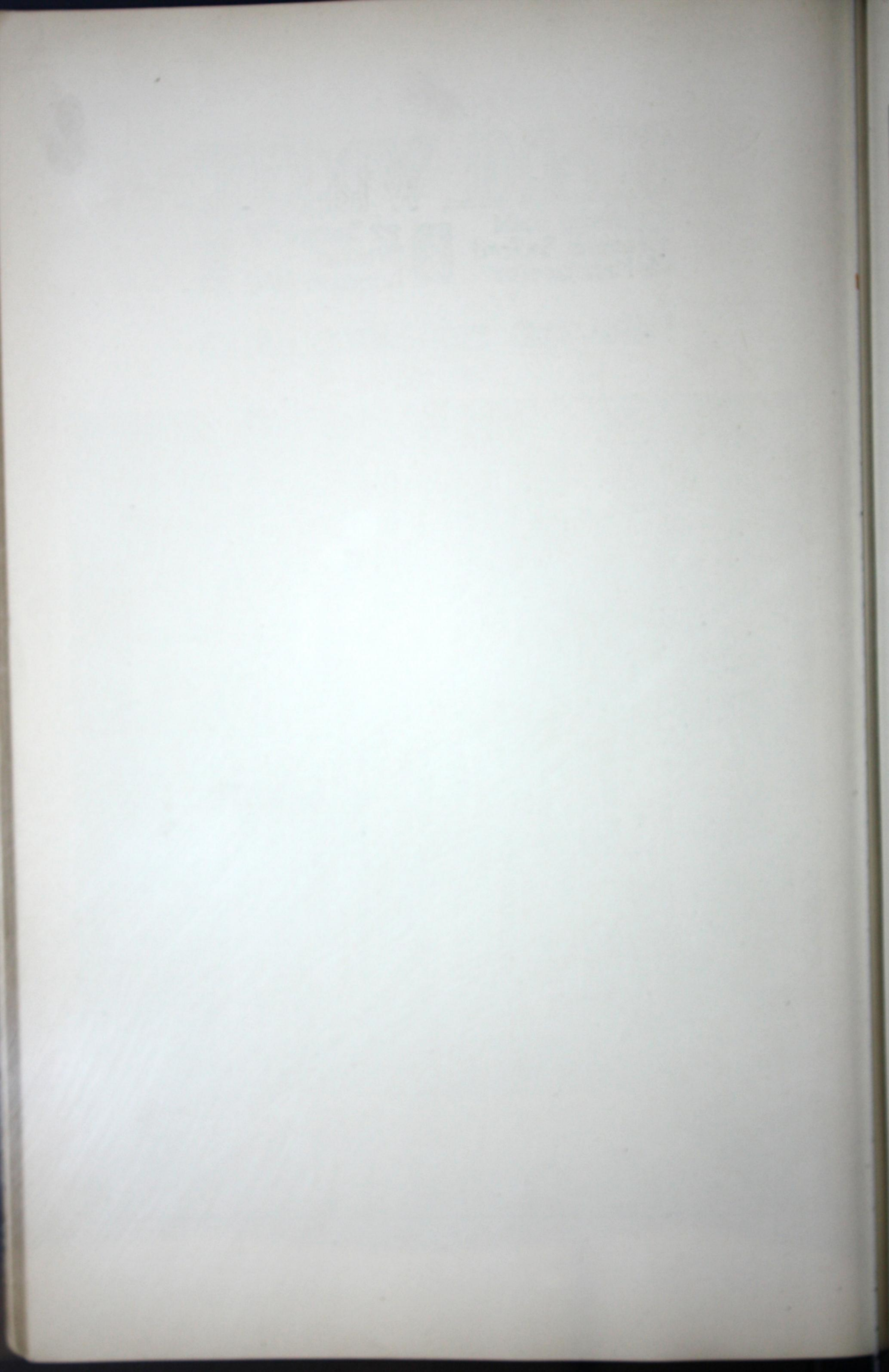
22 Surrey St
Strand
London W.C

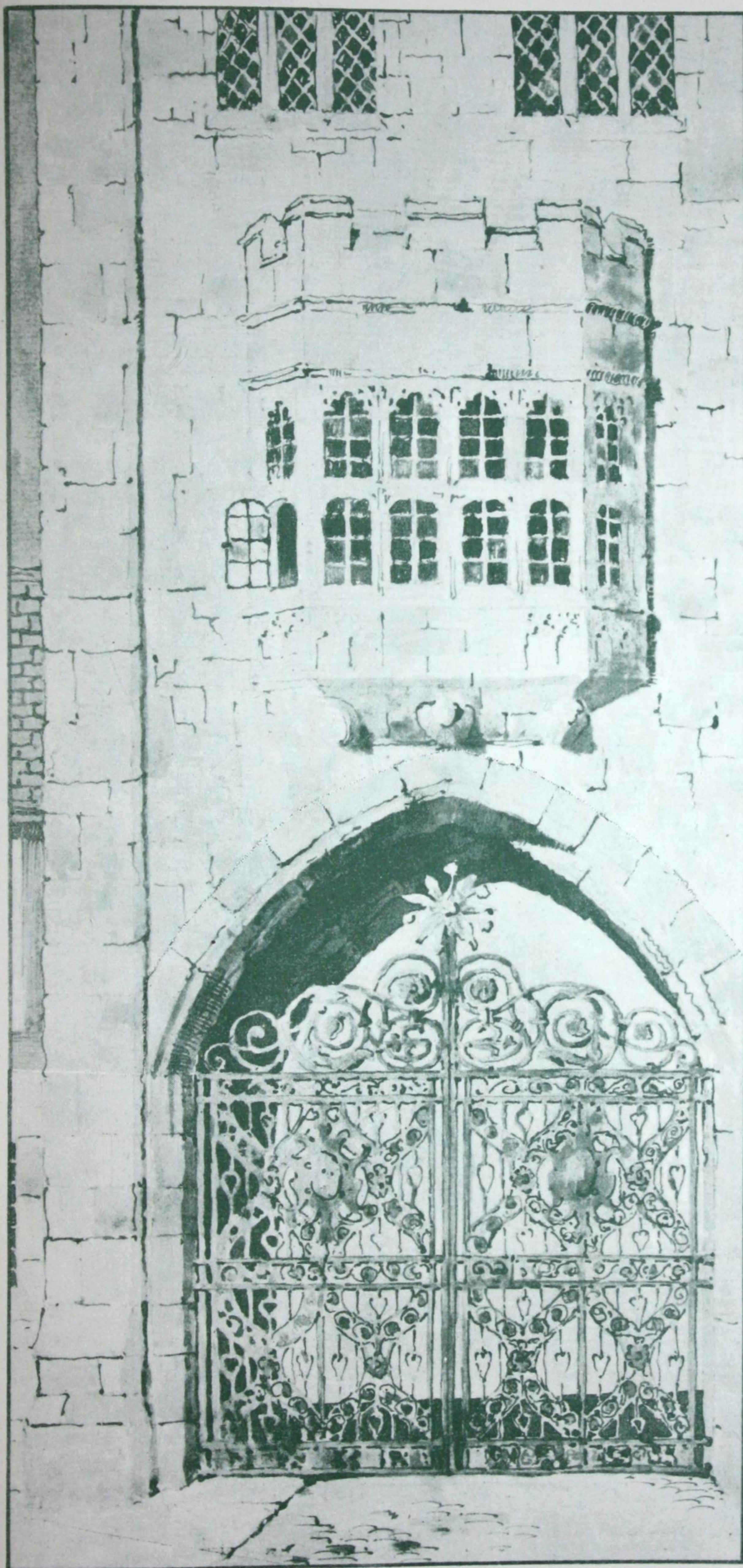


PARK AND ENTRANCE GATES

No 500







GEORGE WRAGGE

Wardry metal
works Salford
Manchester
22 Surrey St
Strand
London W.C

Nº 114

GATES · & · GRILLES
CHANCEL · SCREENS

ALTAR RAILS &
STANDARDS

DOG GRATES
FENDERS · & · IRONS

RAILINGS · AND
BALUSTRADES

GAS · & · ELECTRIC
LIGHT FITTINGS

VANES
TERMINALS

GEORGE WRAGGE

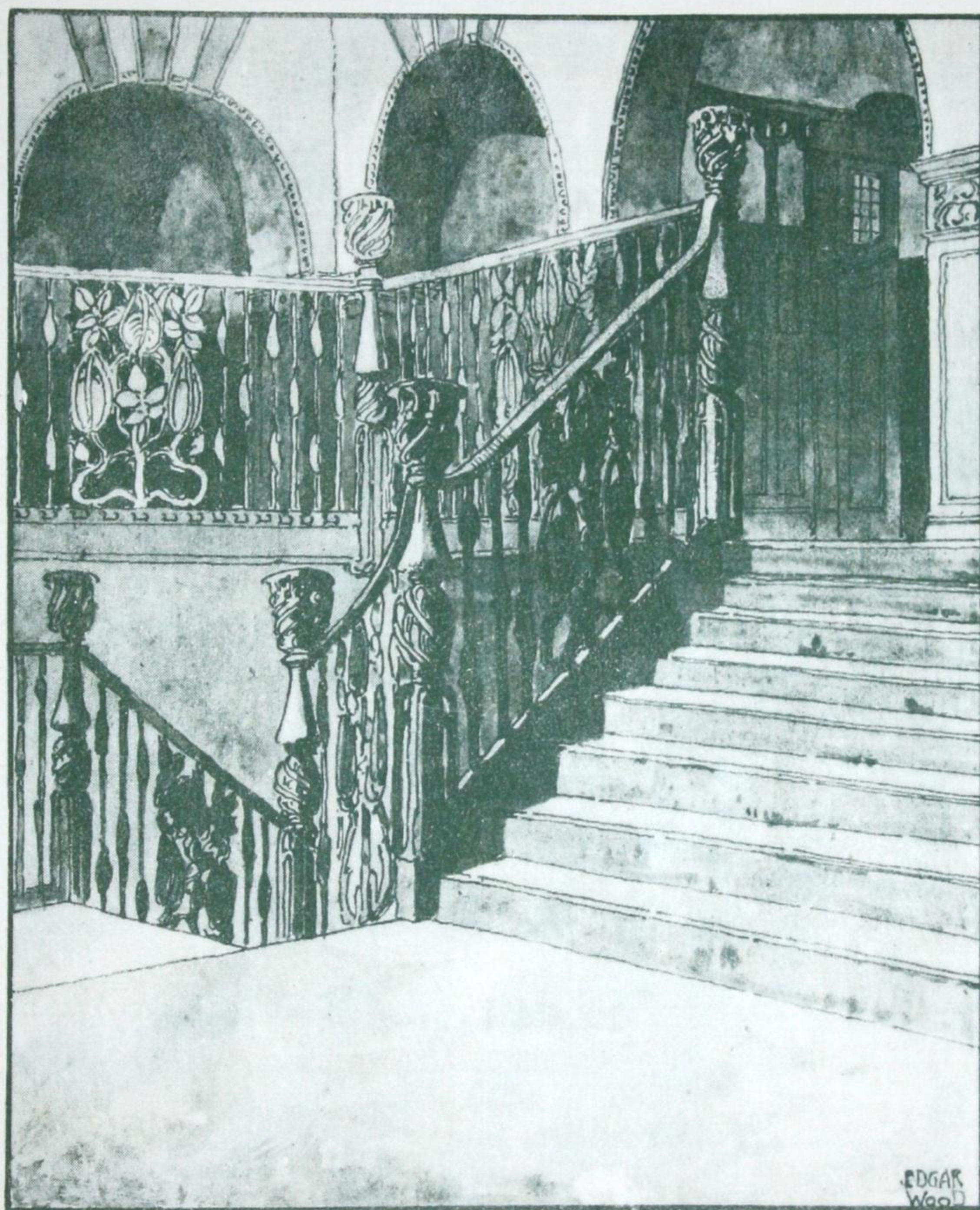
Wardro metal
works Salford
Manchester



22 Surrey St
Strand
London W.C



STAIR
BALUSTERS,
NEWELS,
HANDRAILS,
STAIR RAILING



& PANELLING
IN HAMMERED
IRON, BRONZE
COPPER
ALUMINIUM ETC

Nº 800



Nº 801



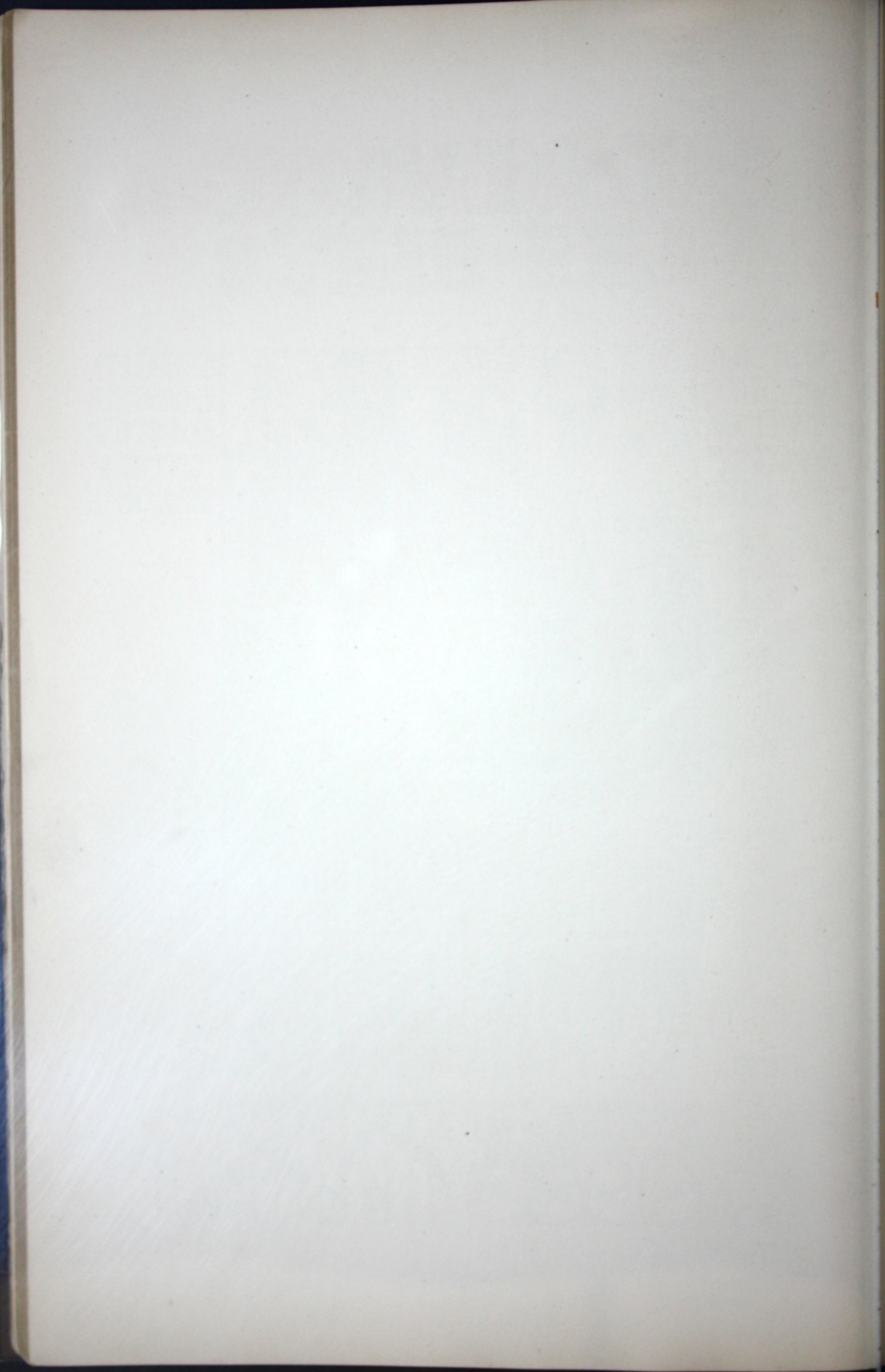
Nº 802



Nº 803



Nº 804





No. 700



No. 701



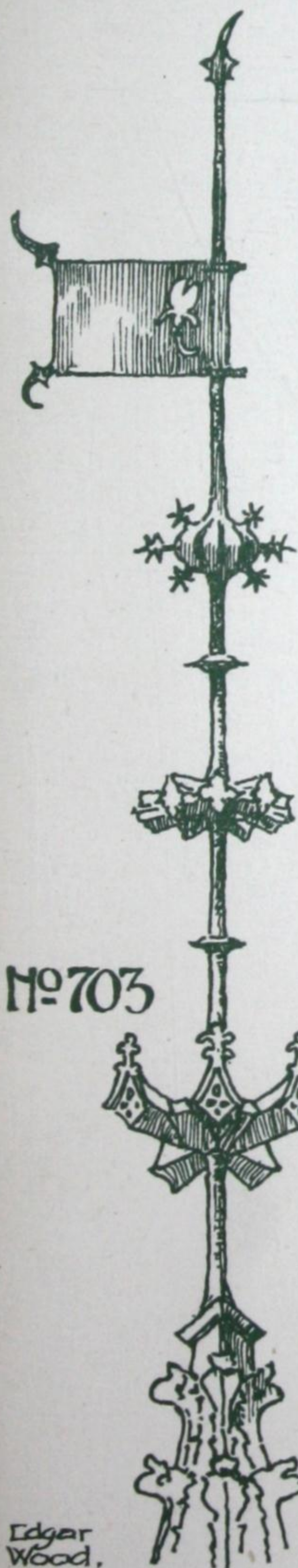
No. 702

GEORGE WRAGGE

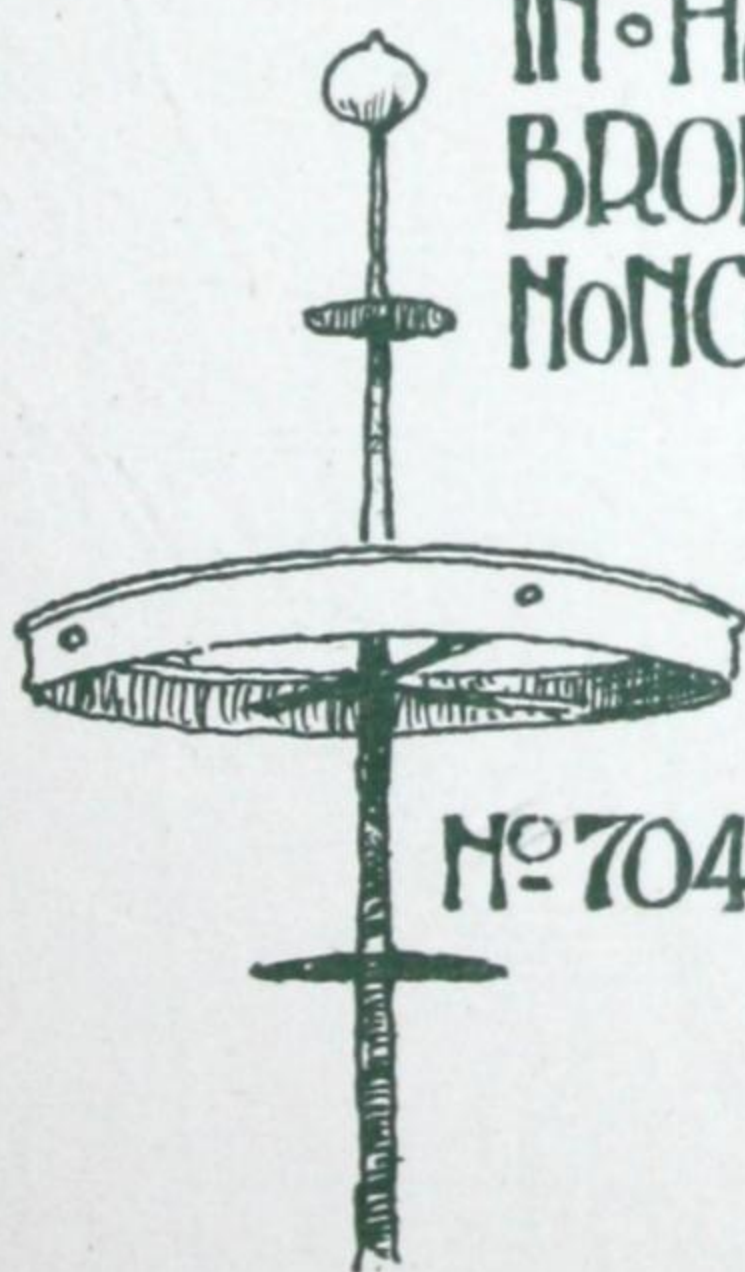
Wardry metal
works Salford
Manchester

22 Surrey St
Strand
London W.C.

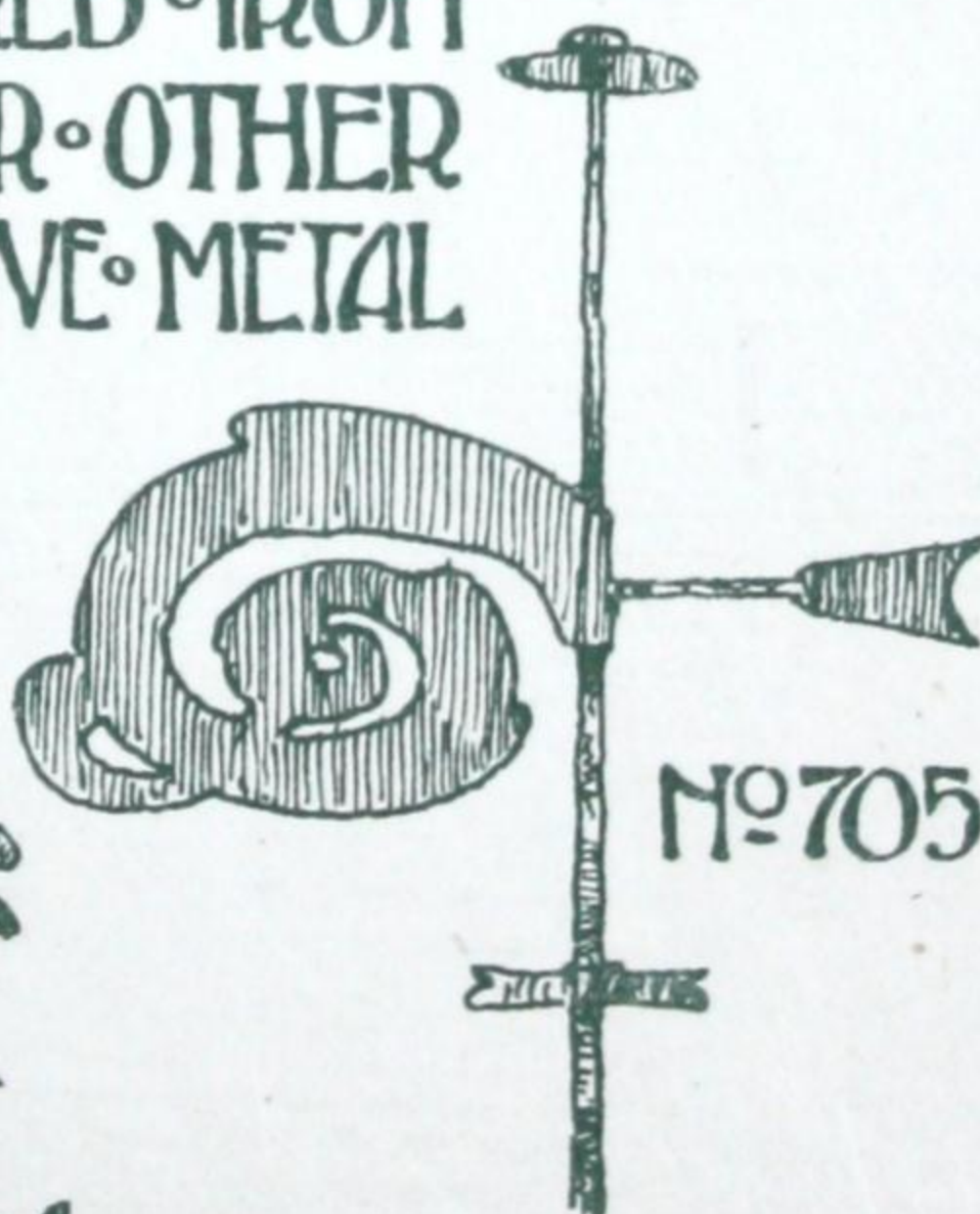
VANES & TERMINALS
IN HAMMERED IRON
BRONZE OR OTHER
NONCORROSIVE METAL



No. 703



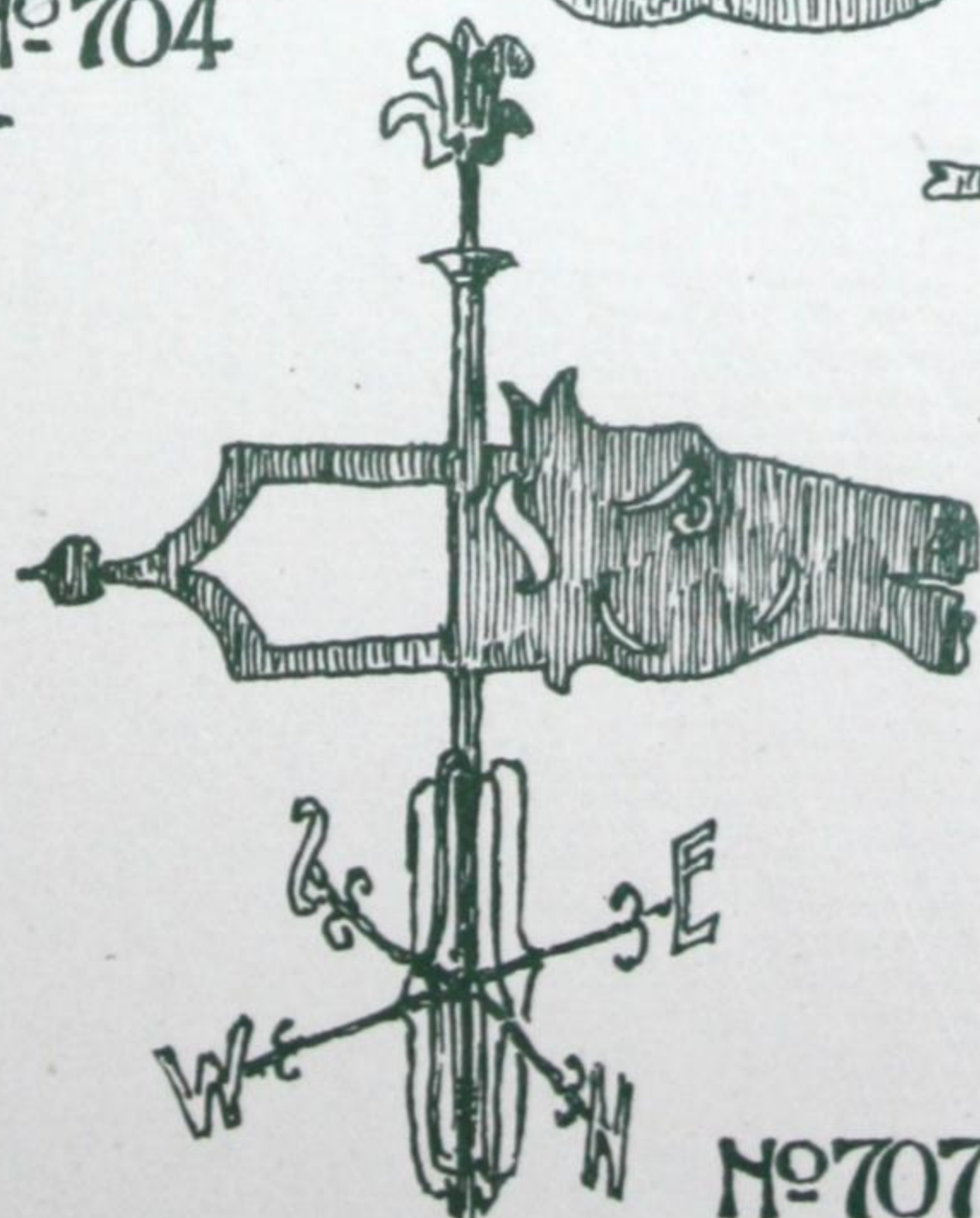
No. 704



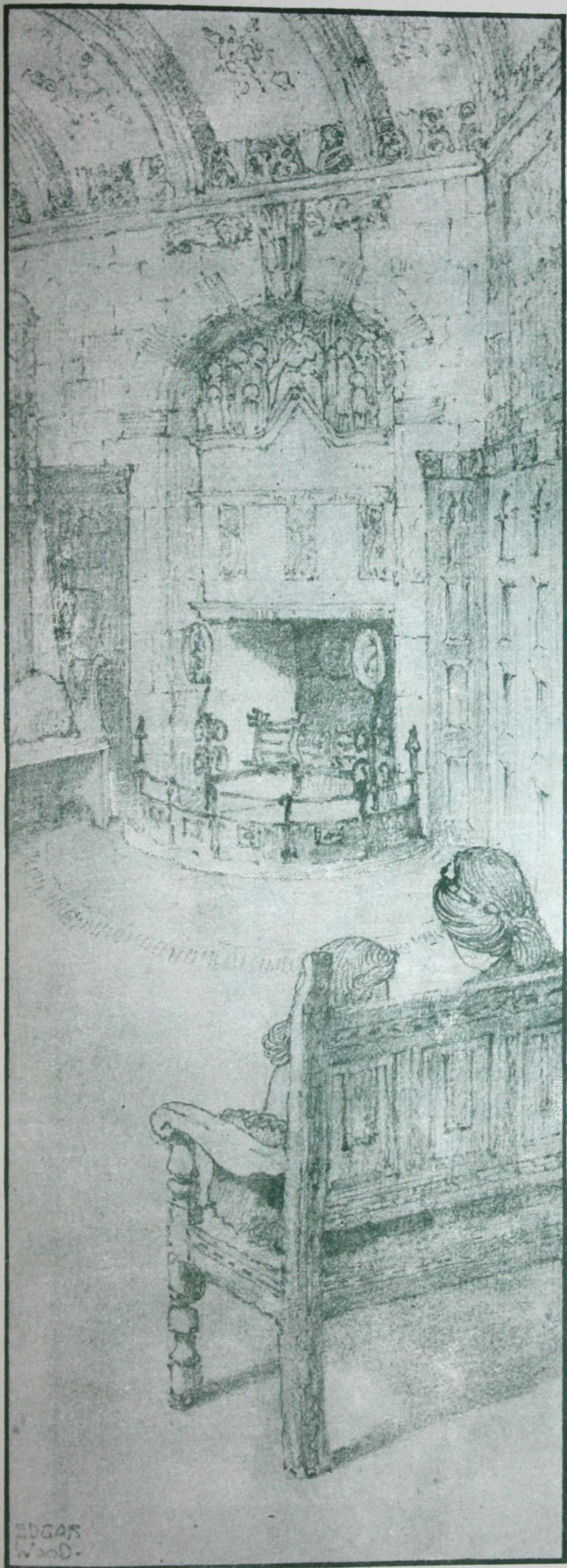
No. 705



No. 706



No. 707



GEORGE WRAGGE

Wardry metal
works Salford
Manchester
22 Surrey St
Strand
London W.C.

DOG GRATES AND OTHER:
FORMS IN HAMMERED IRON
STEEL, BRONZE, COPPER, :
KRONAND ETC. 

IRONS, BRASSES, AND DOGS
FENDERS AND KERBS. :
HOODS IN VARIOVS METALS

Nº400



Wardry metal
works Salford
Manchester

GEORGE WRAGGE

22 Surrey St
Strand
London W.C



Nº300

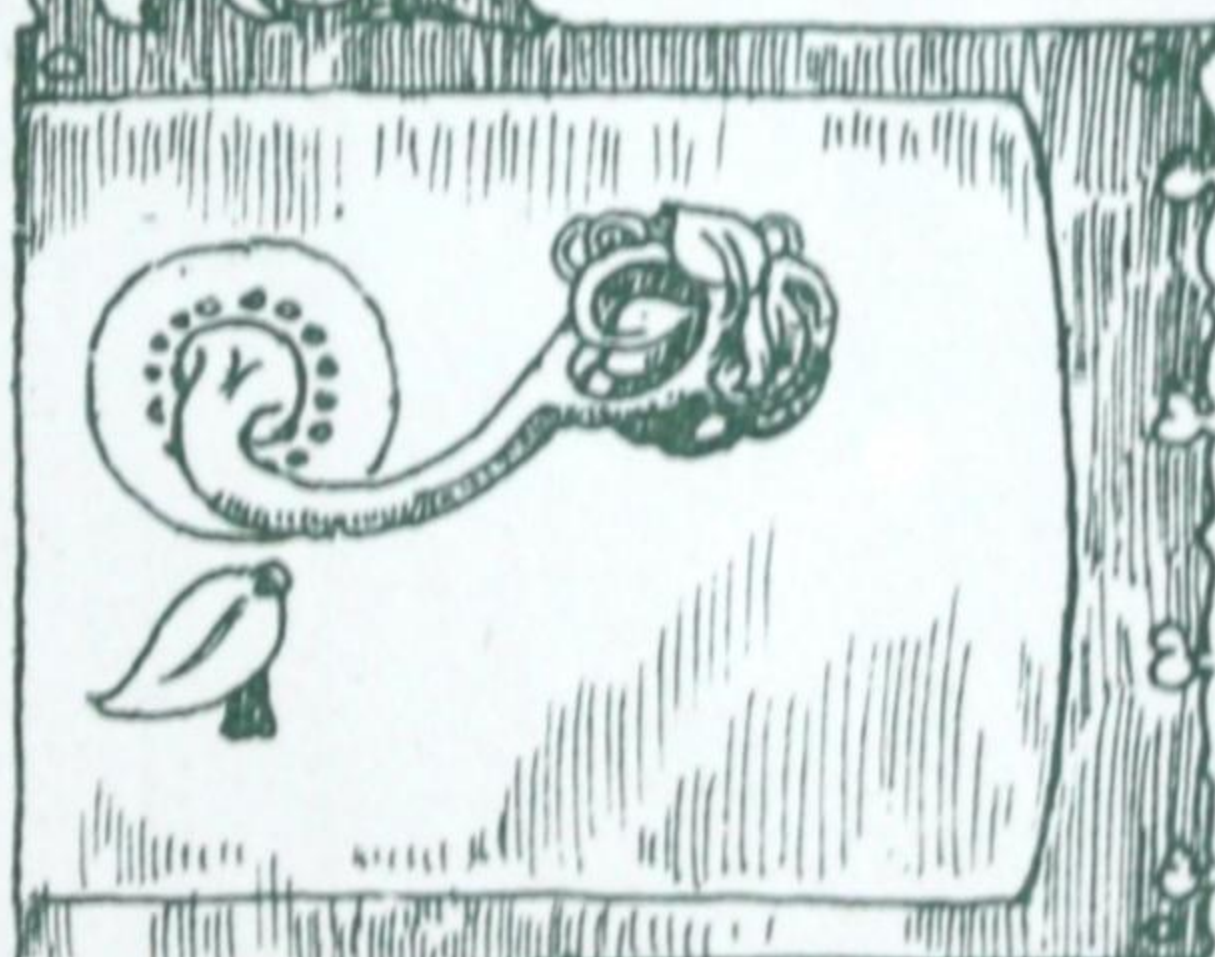


Nº301



Nº302

DOOR FURNITURE
IN BRONZE, COPPER,
BRASS, PEWTER,
ALUMINIUM ETC



Nº303



Nº304



Nº305



Nº306

ABOUT HALF
FULL SIZE.

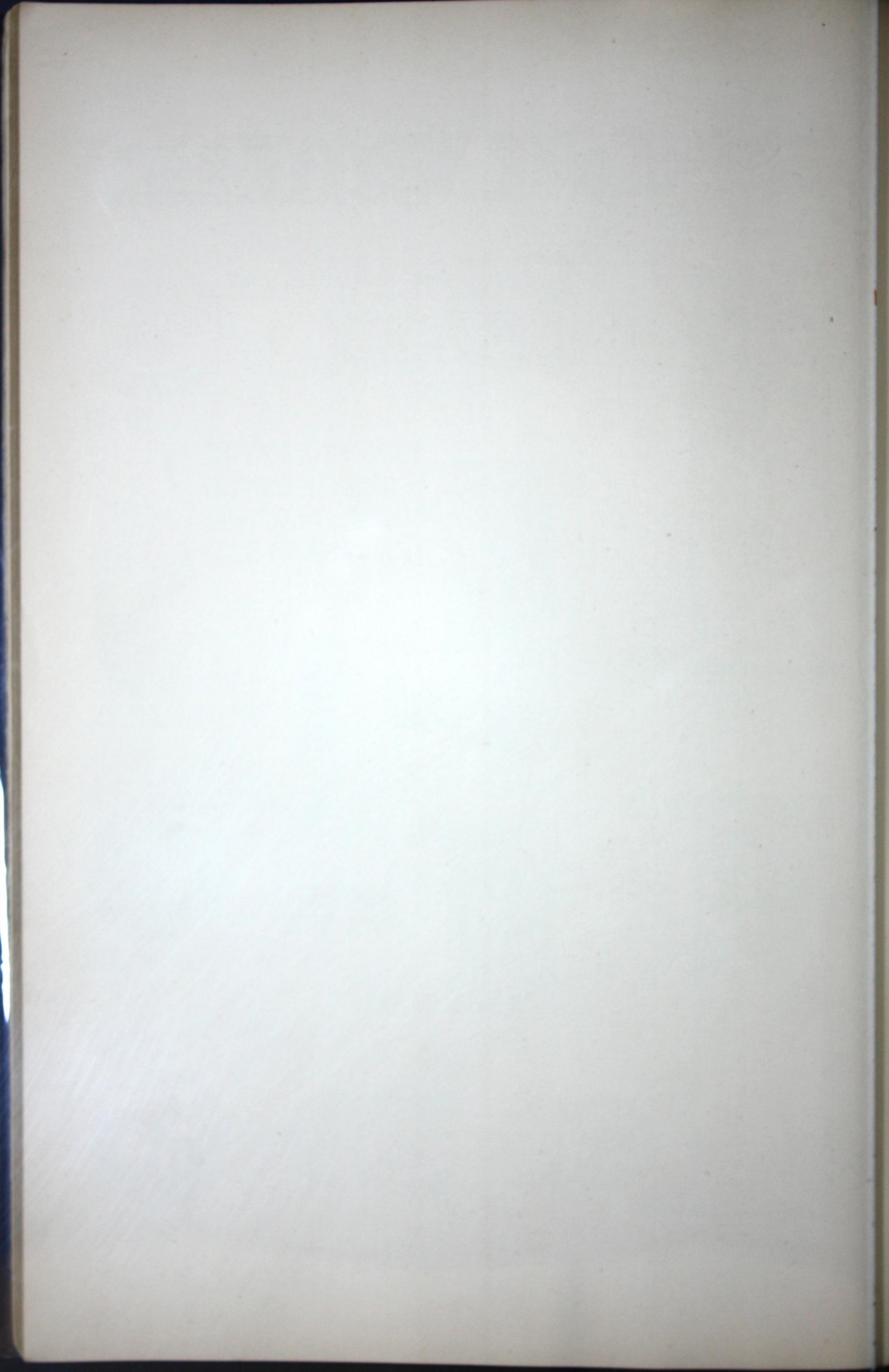
Nº308



Nº307



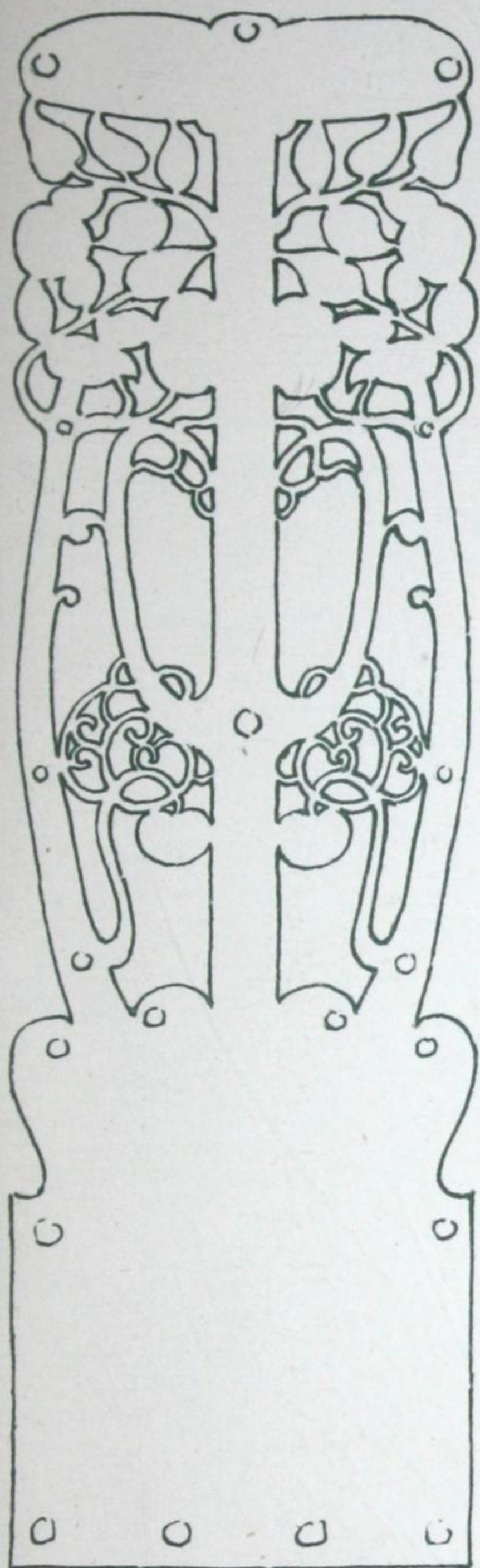
EDGAR
WOOD



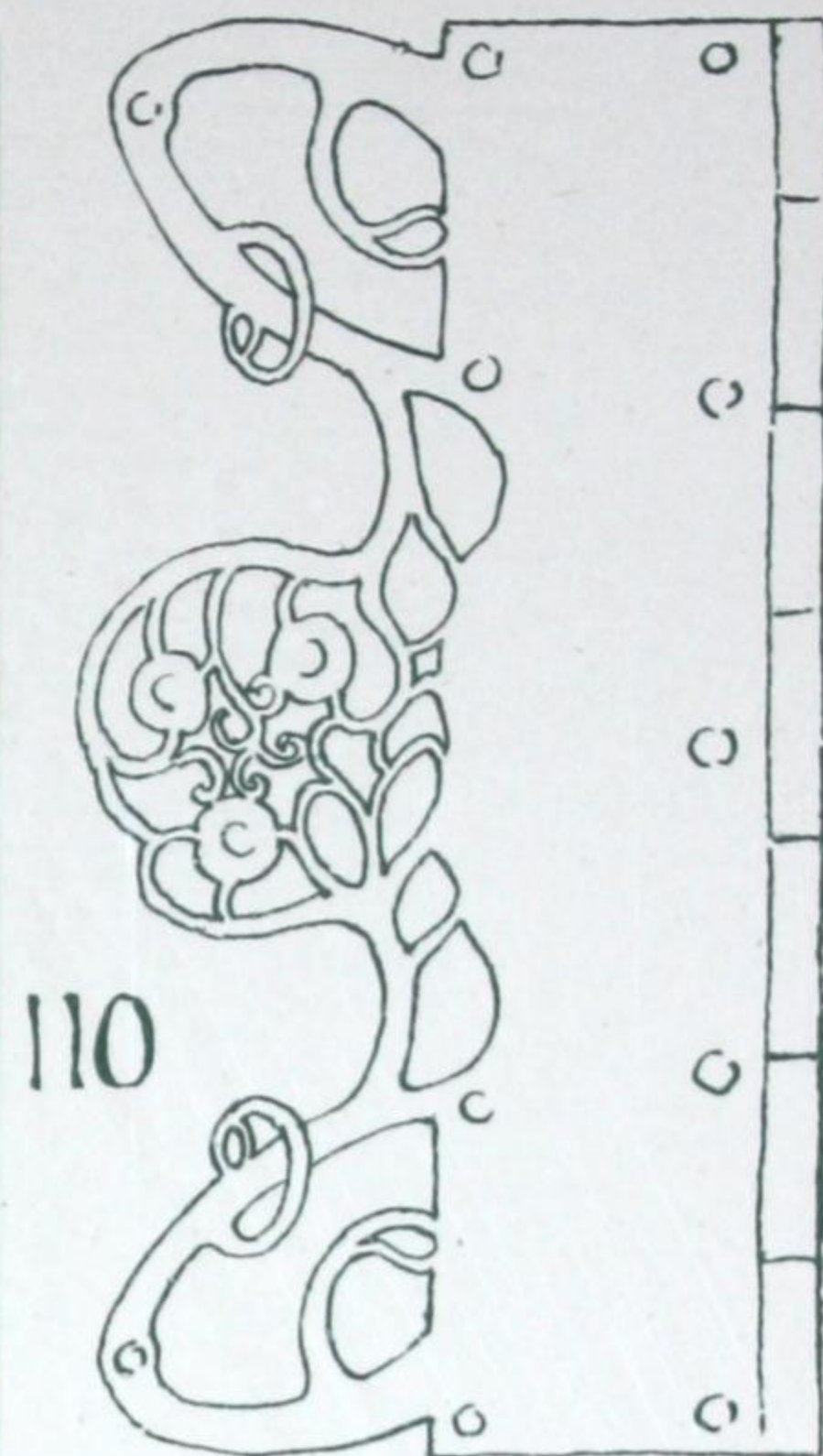
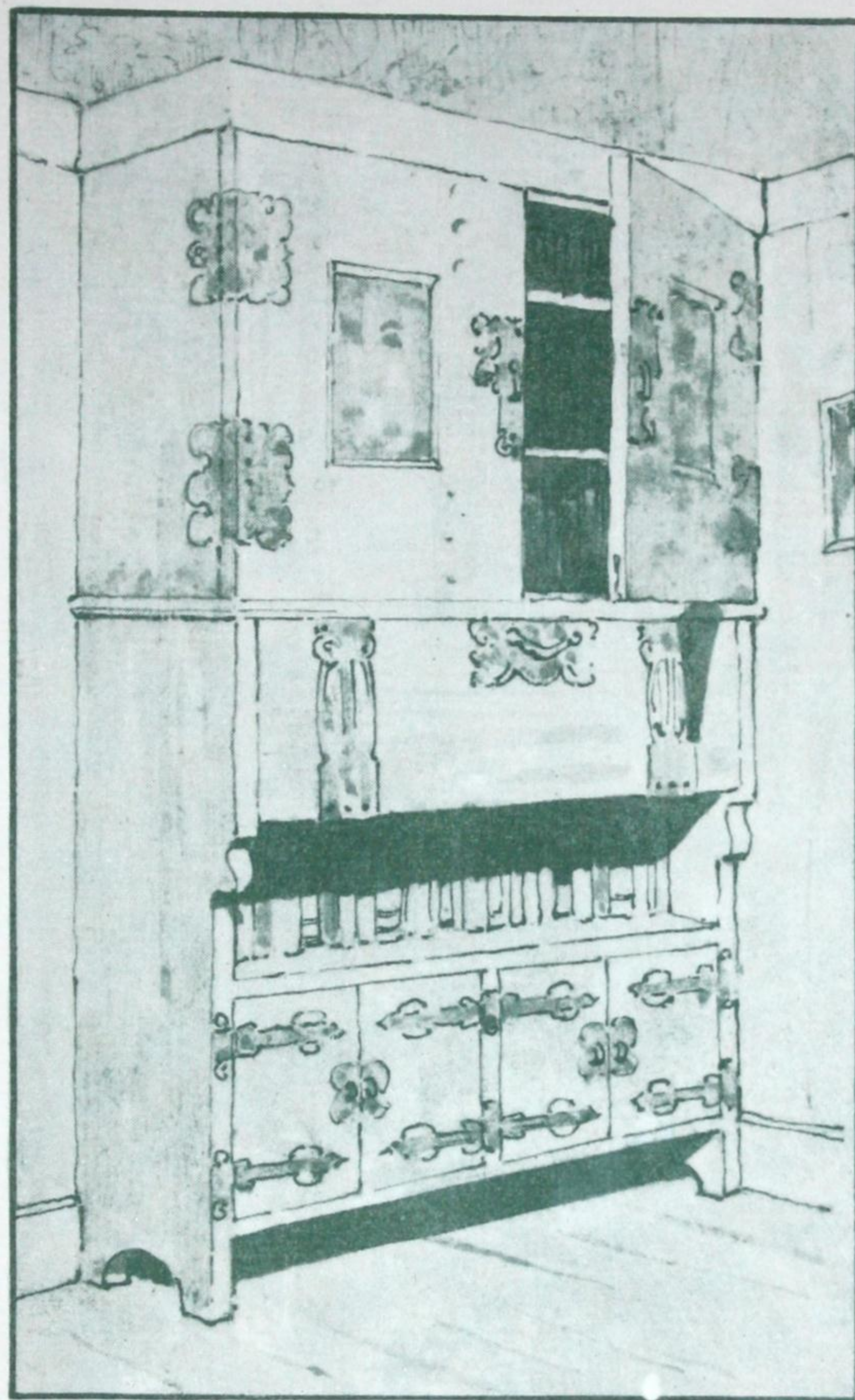
Wardry metal
works Salford
Manchester

GEORGE WRAGGE

22 Surrey St
Strand
London W.C



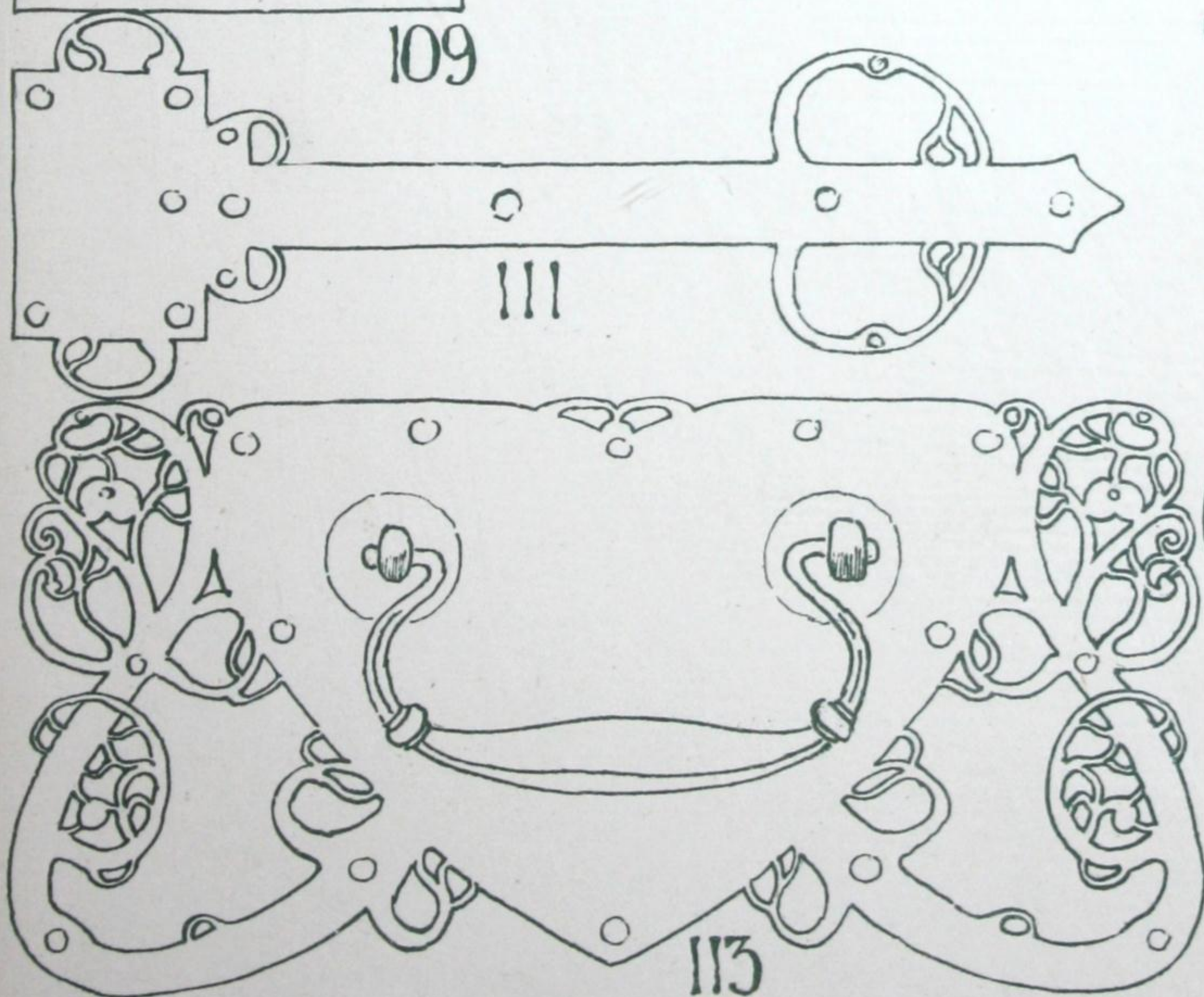
109



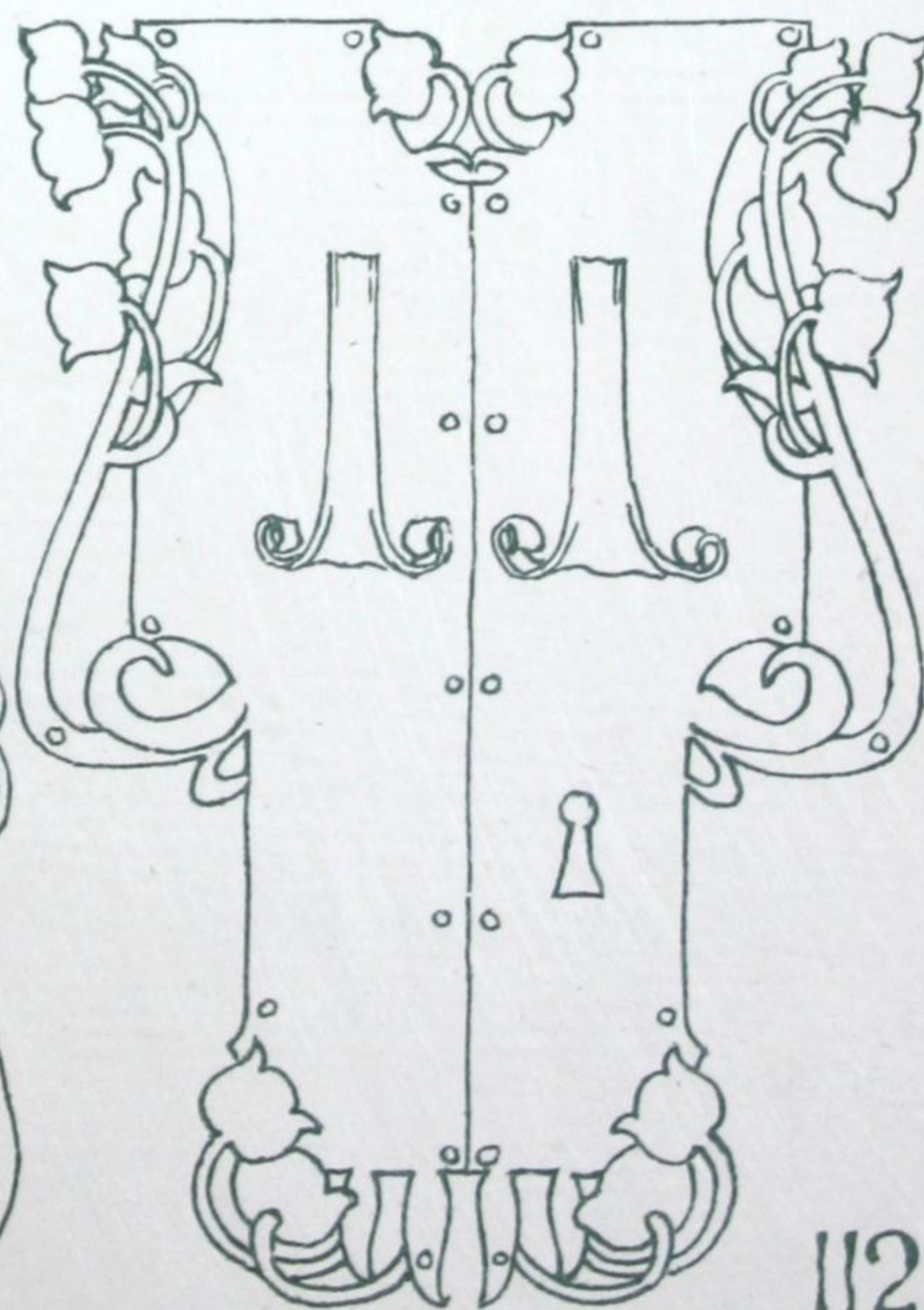
110

CABINET :
METAL WORK
IN COPPER ·
BRASS · IRON
ALUMINIUM · ETC.

HALF
FULL
SIZE



113



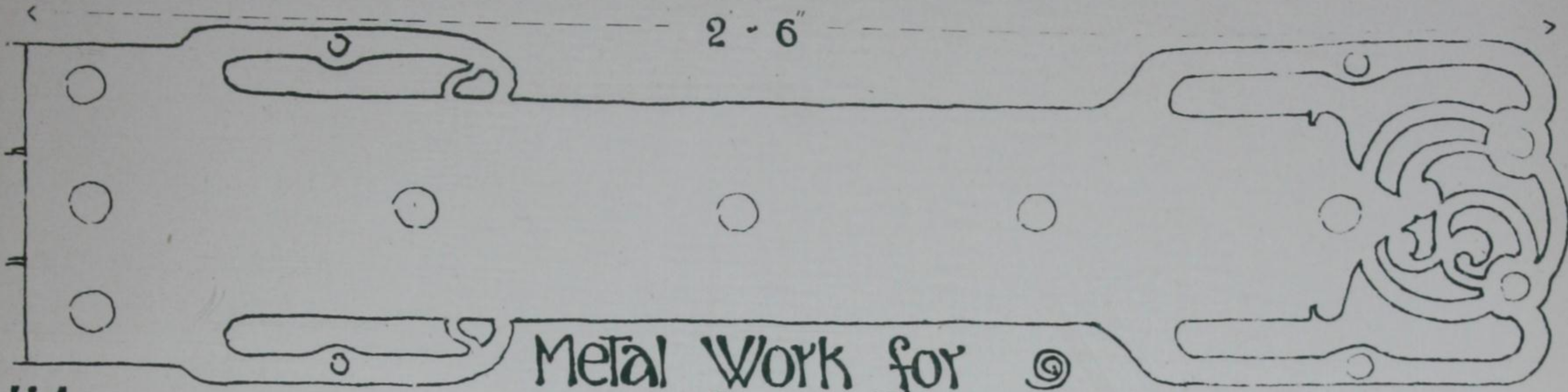
112



Wardry metal
works Salford
Manchester

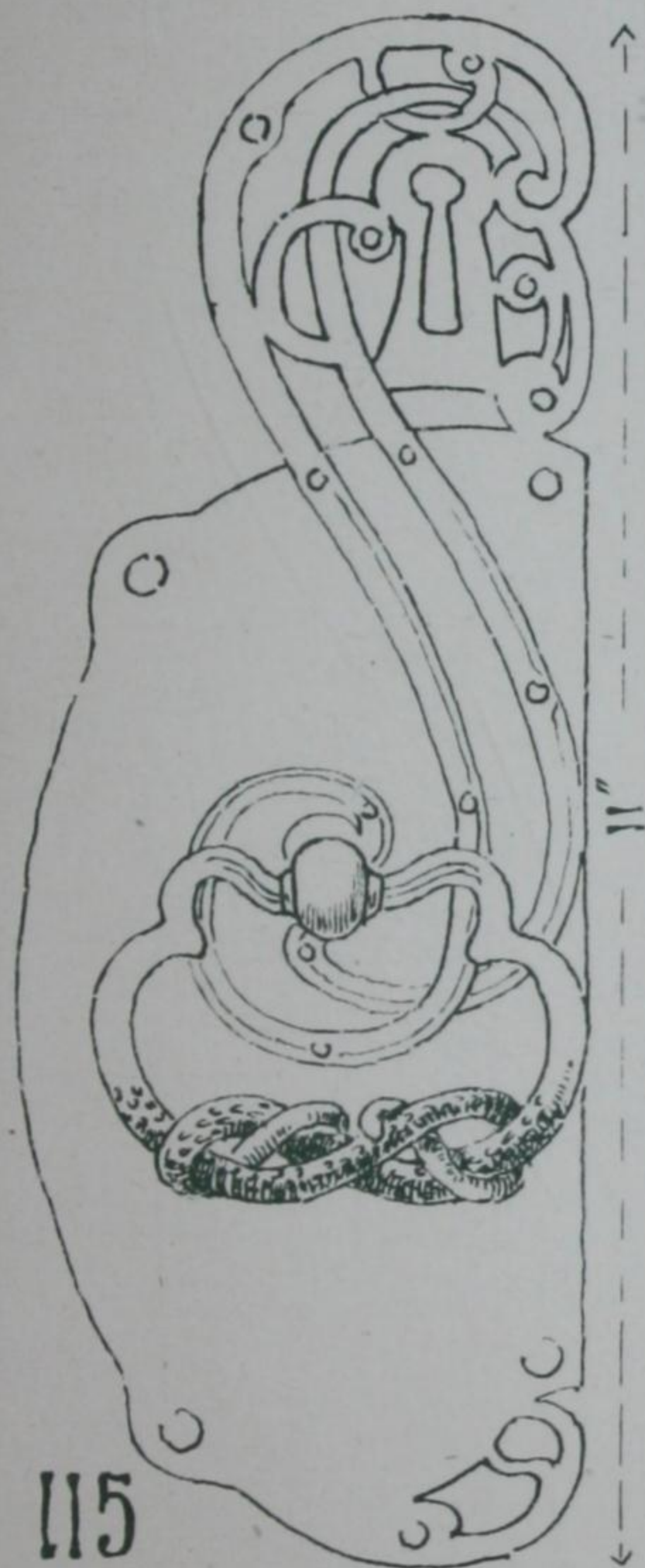
GEORGE WRAGGE

22 Surrey St
Strand
London W.C

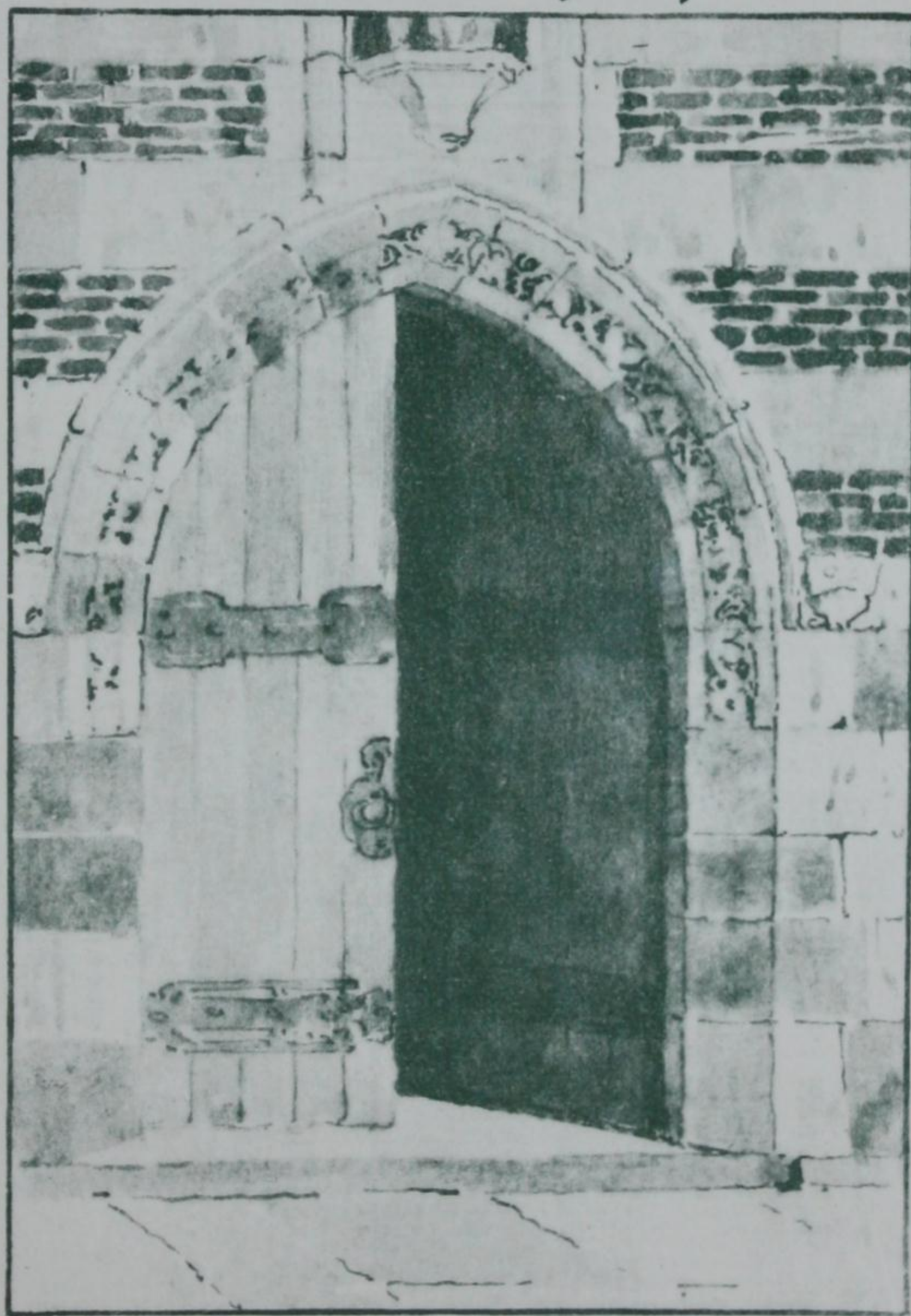


114

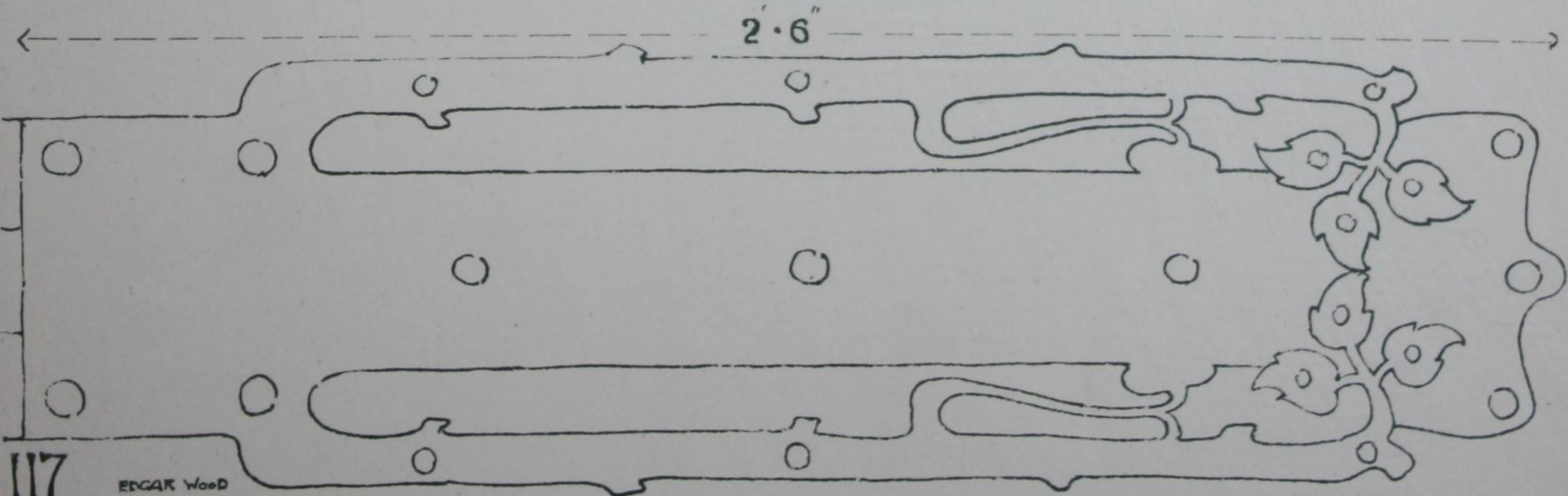
Metal Work for
Domestic and
Ecclesiastical purposes



115



116



117

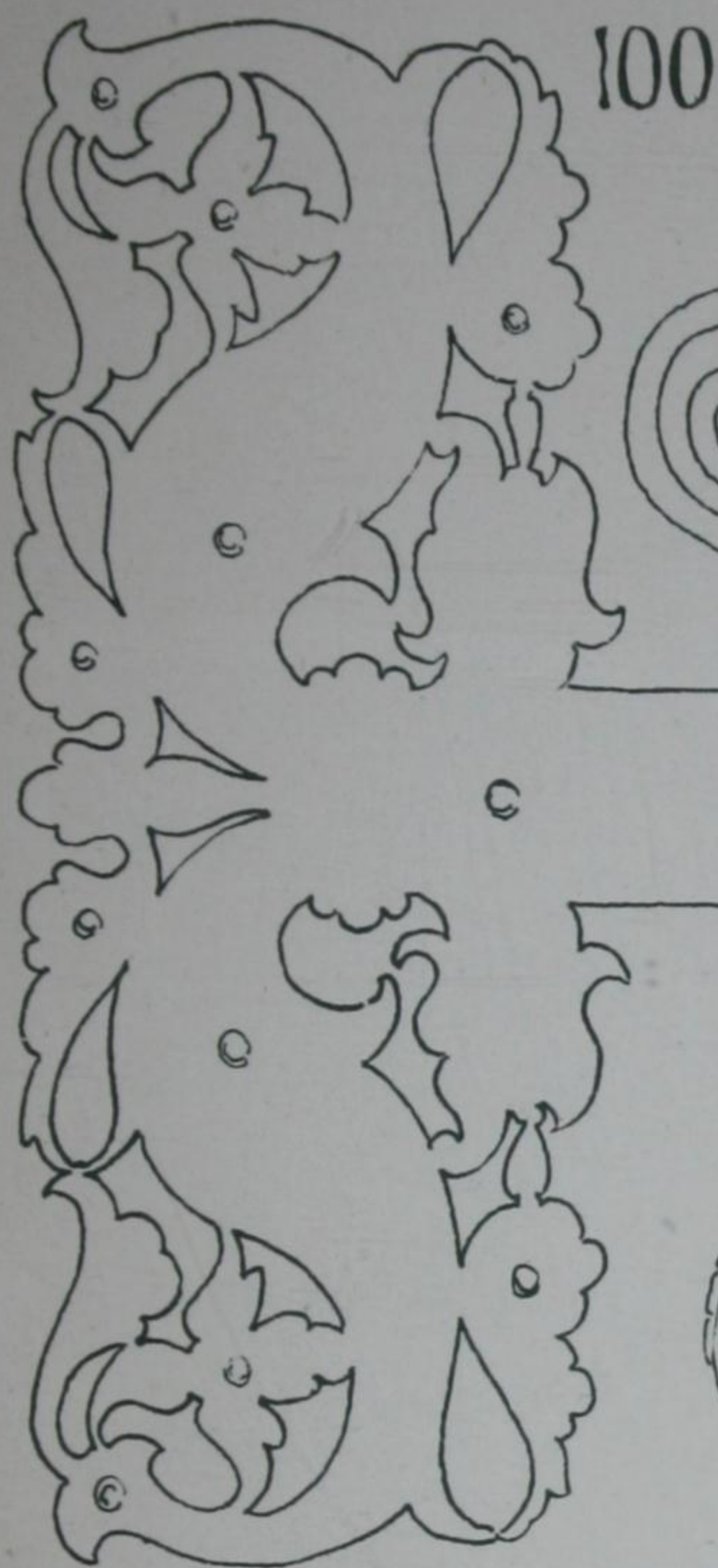
EDGAR WOOD



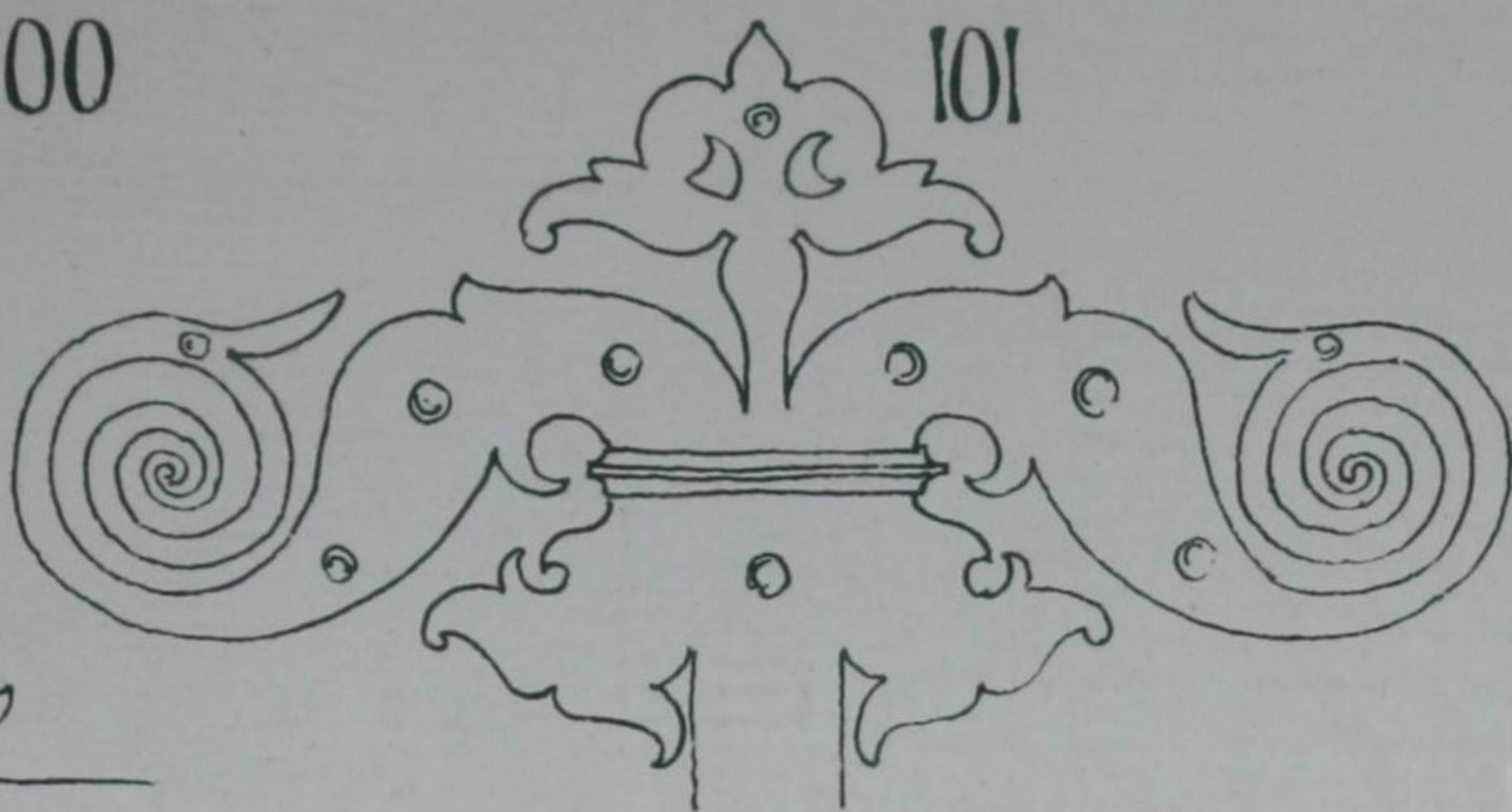
Wardry metal
works Salford
Manchester

GEORGE WRAGGE

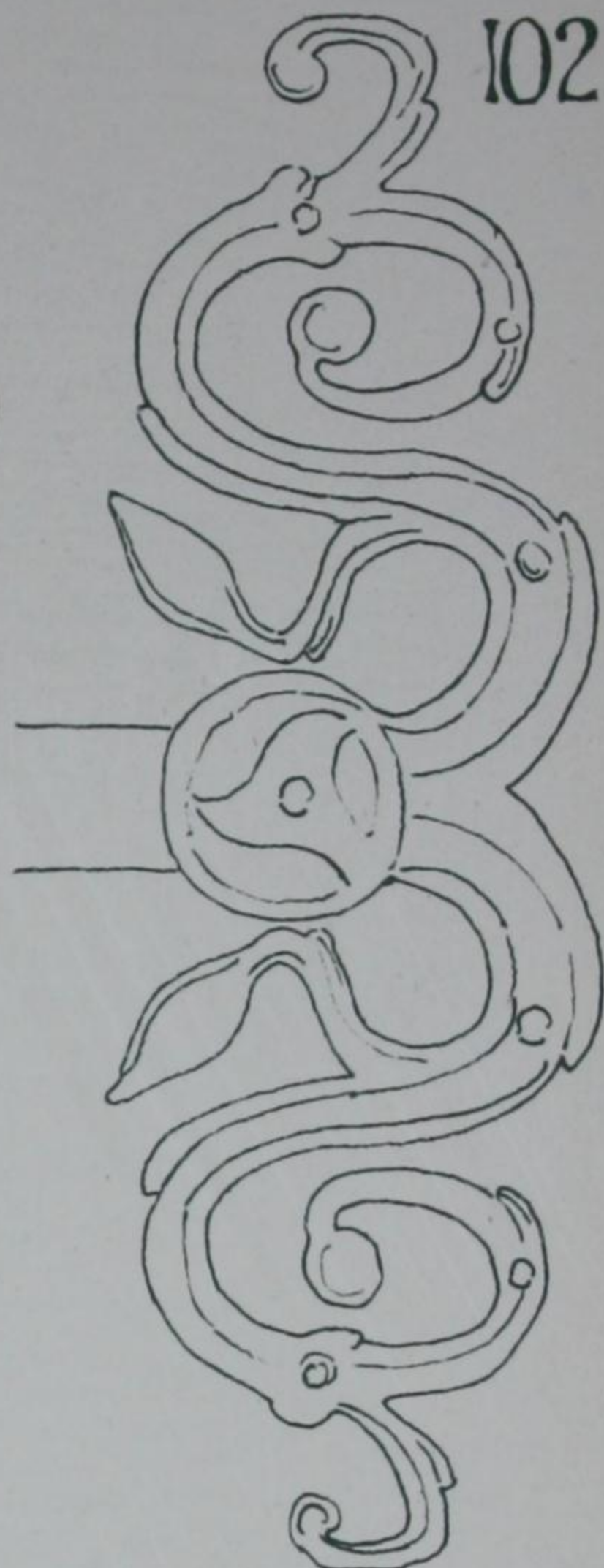
22 Surrey St
Strand
London W.C



100



101

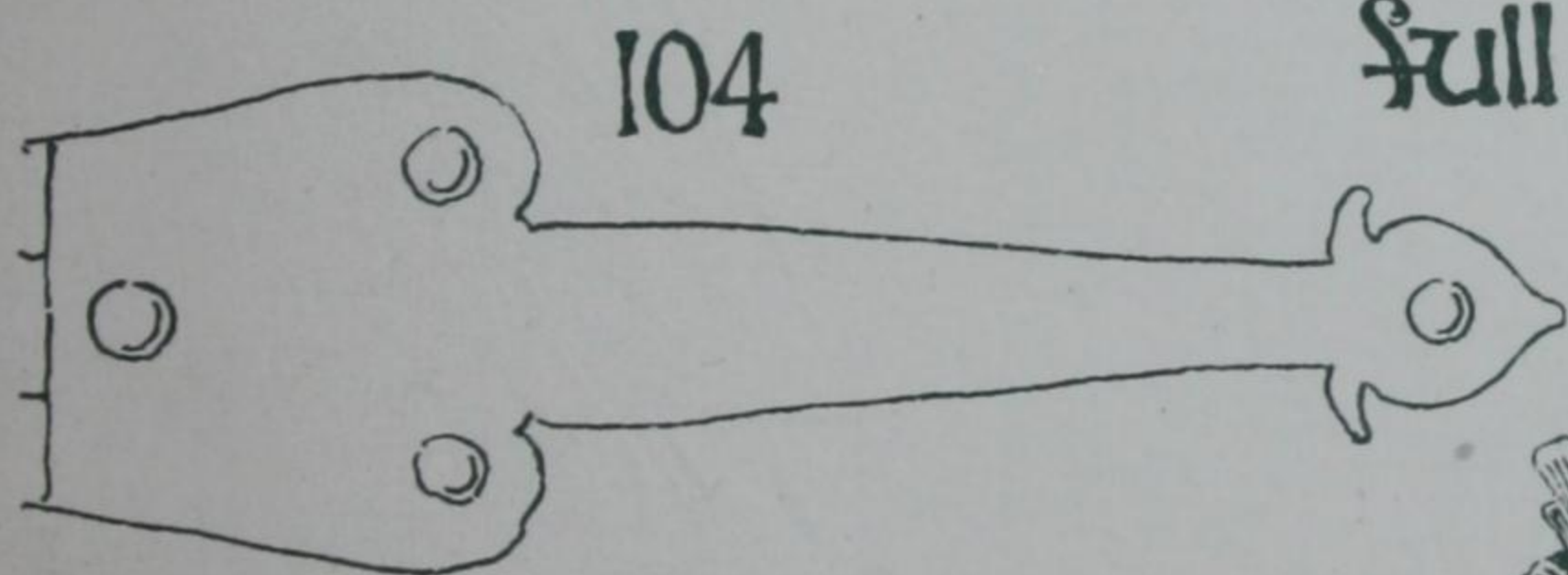


102

Door Furniture
in wrought metal

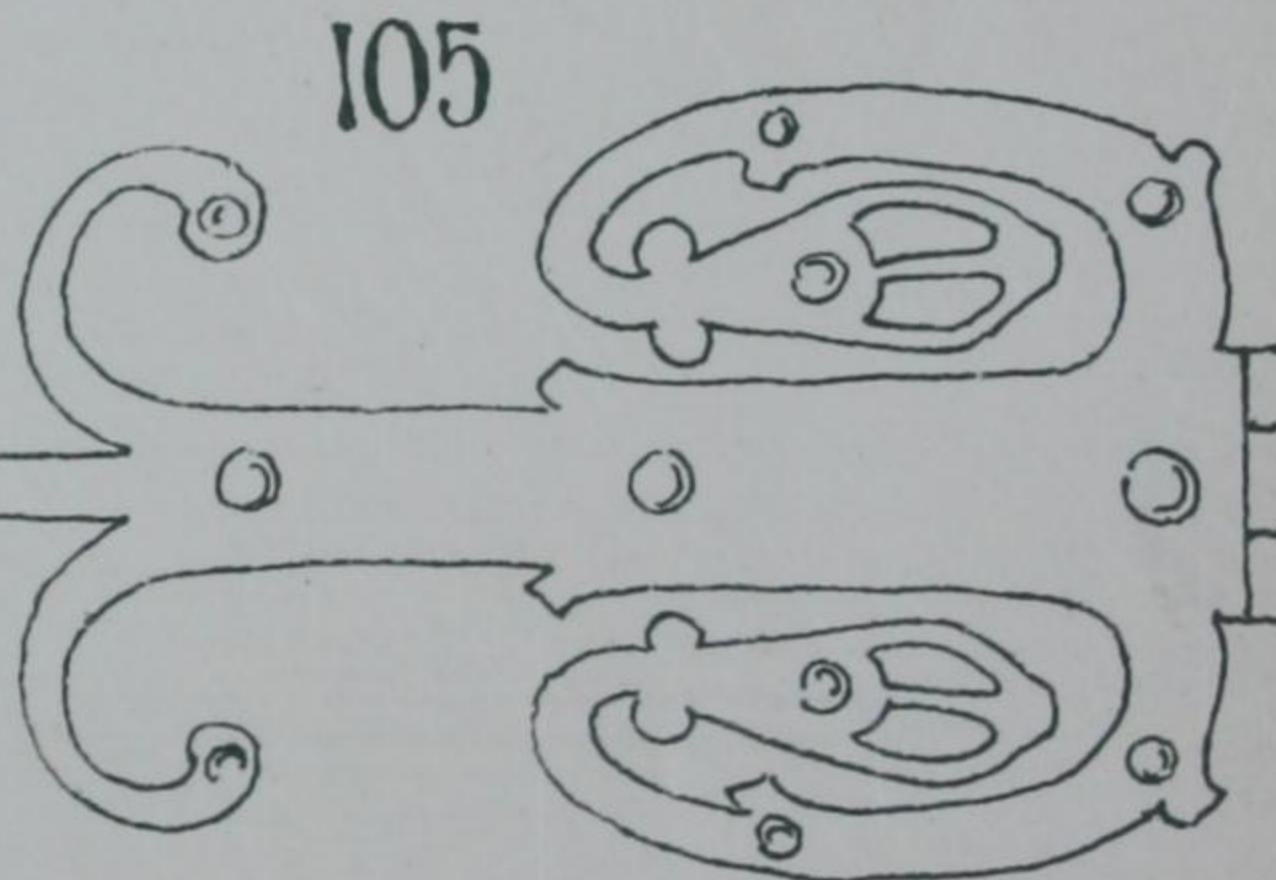


103

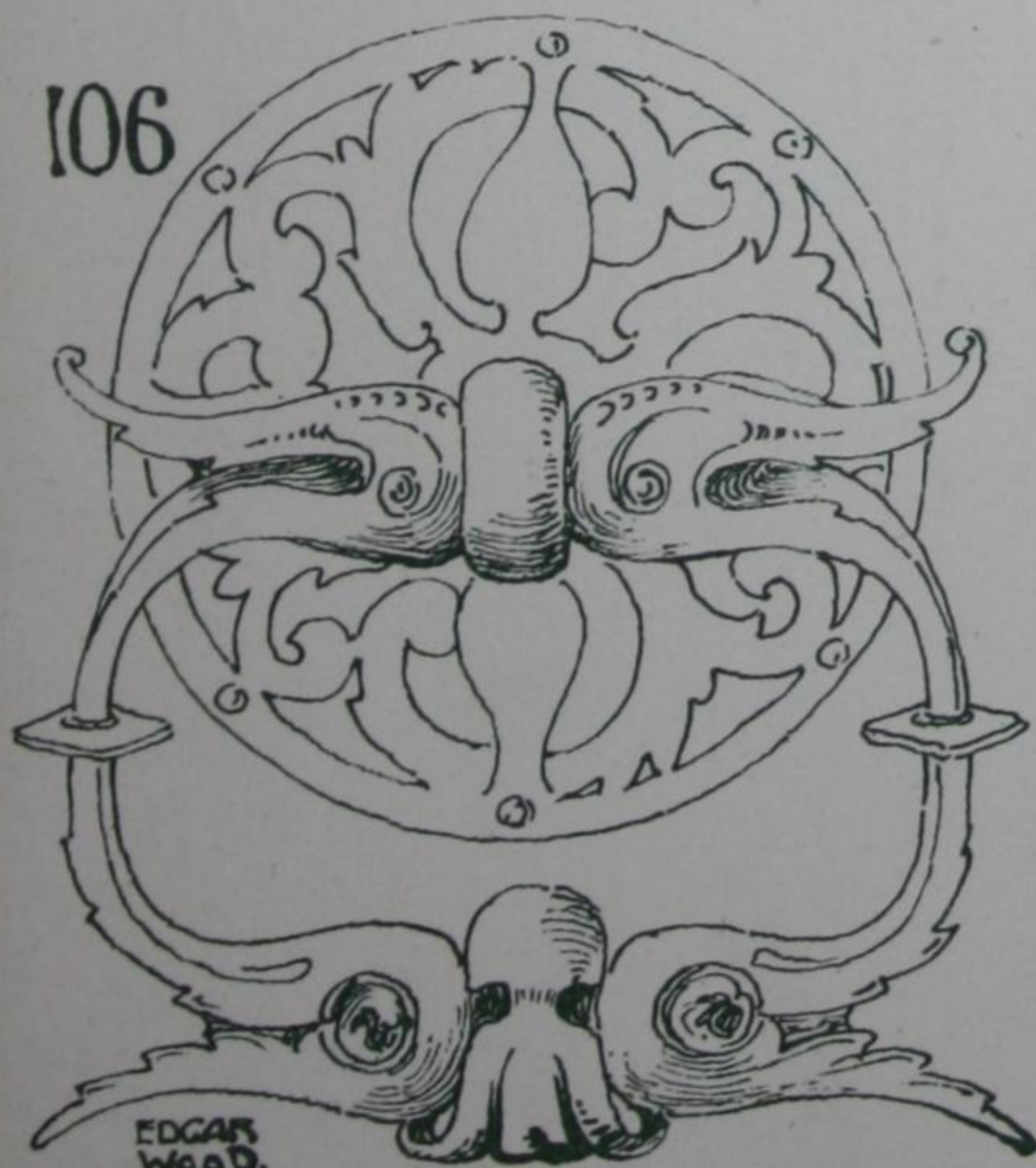


104

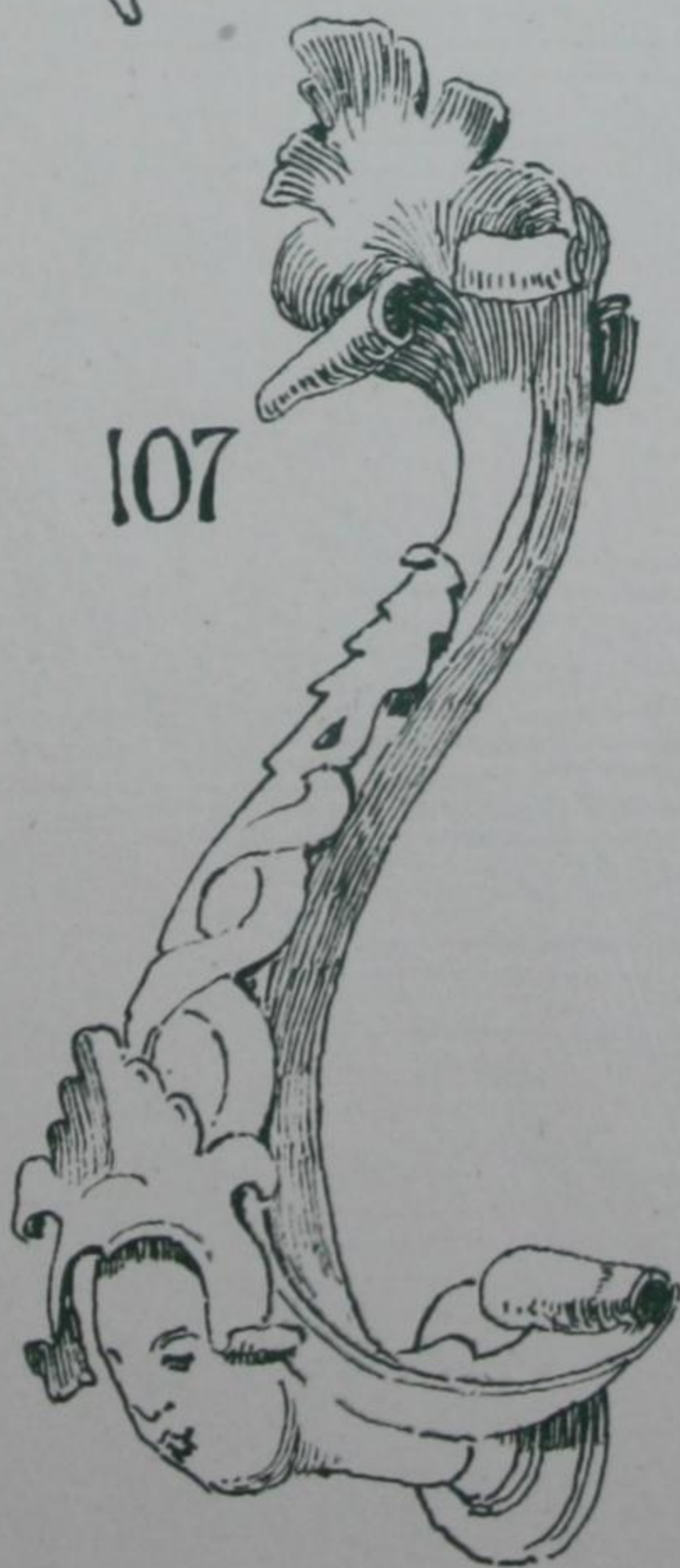
about half
full size



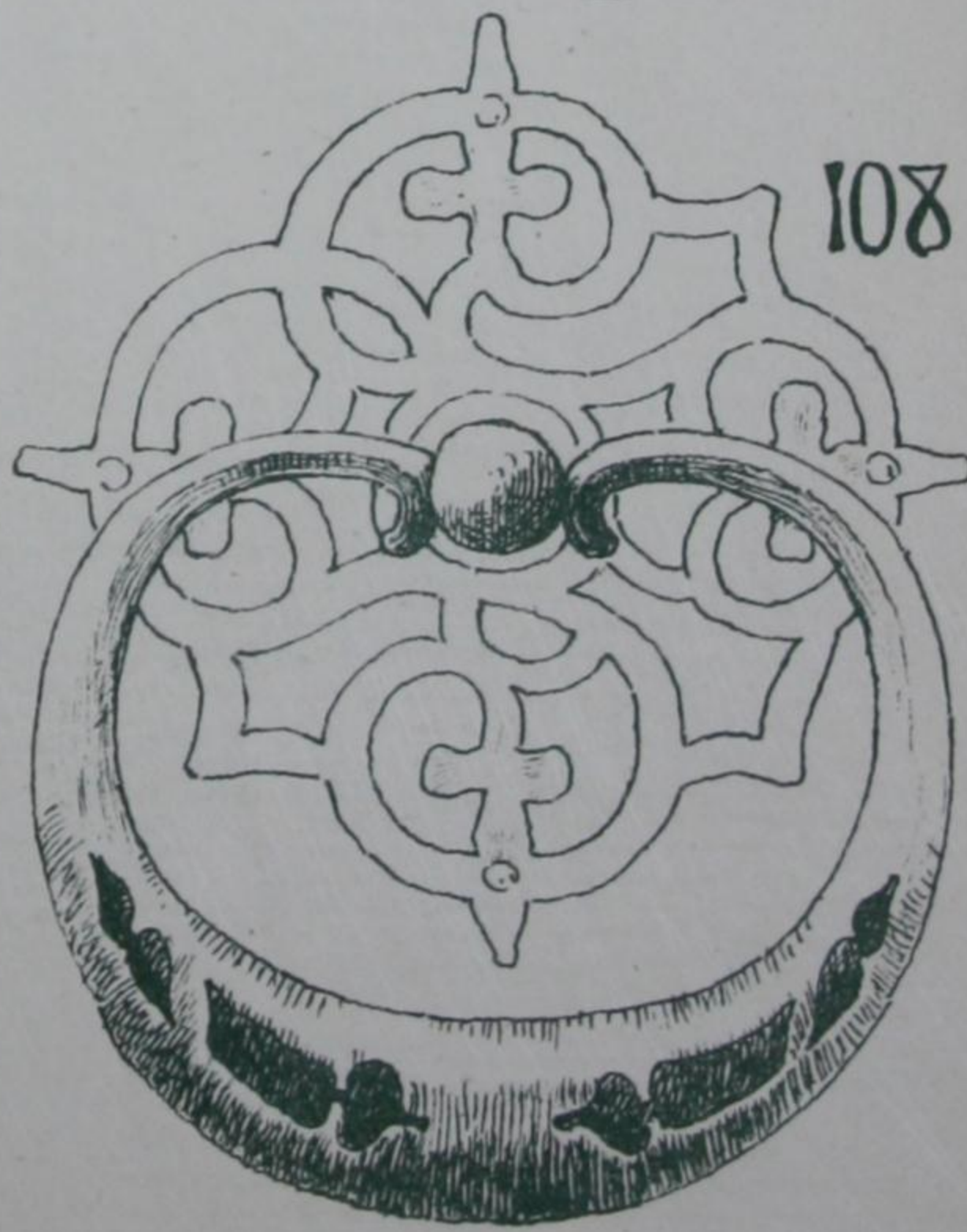
105



106

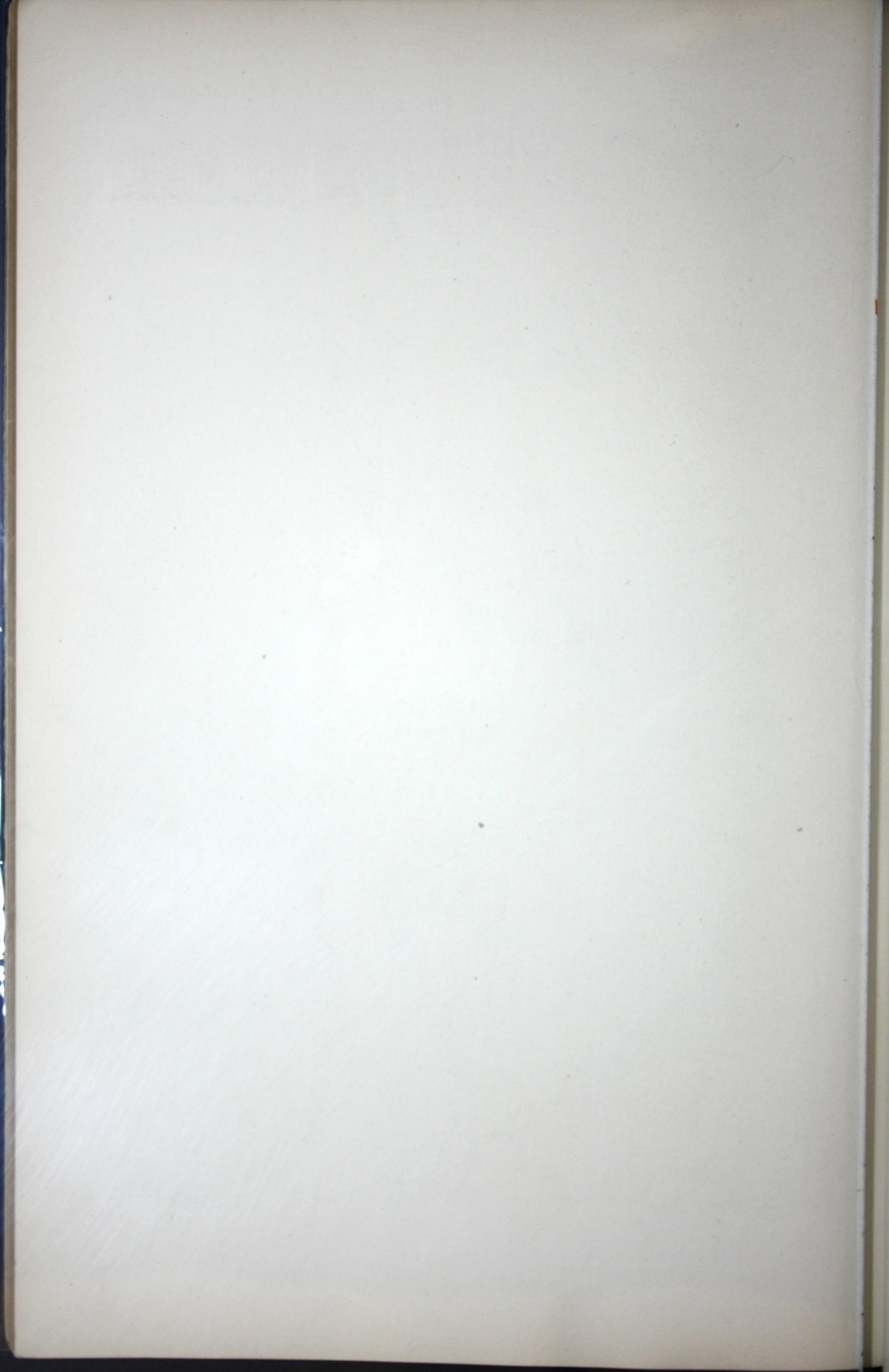


107



108

EDGAR
WOOD.



GEORGE

Wardry metal
works Salford
Manchester



Pillar, Hanging Signs
and other varieties
in wood or metal. ©
Name Plates ©
Stallboard Signs etc

WRAGGE

22 Surrey St
Strand
London W.C. ©

In Bronze © © ©
Aluminium etc.
both cast, wrought,
engraved or ©
repoussé:





GEORGE WRAGGE

Wardry metal
works Salford
Manchester

22 Surrey St
Strand
London W.C.

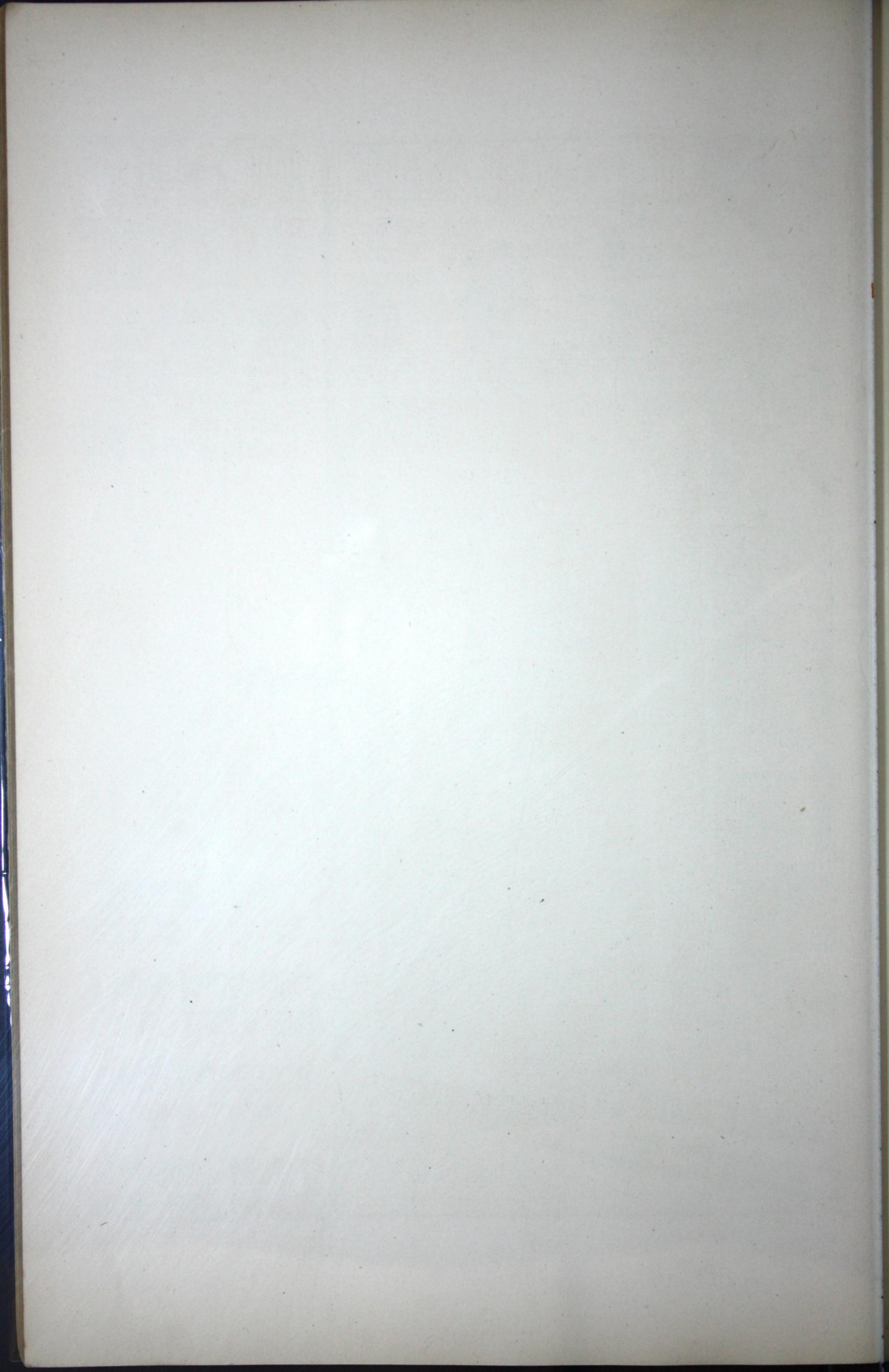
Nº 600

CHANCEL SCREENS
AND GATES

COMMUNION RAILS
AND LECTERNS

READING DESKS
& FONT COVERS

COMMUNION
PLATE ETC

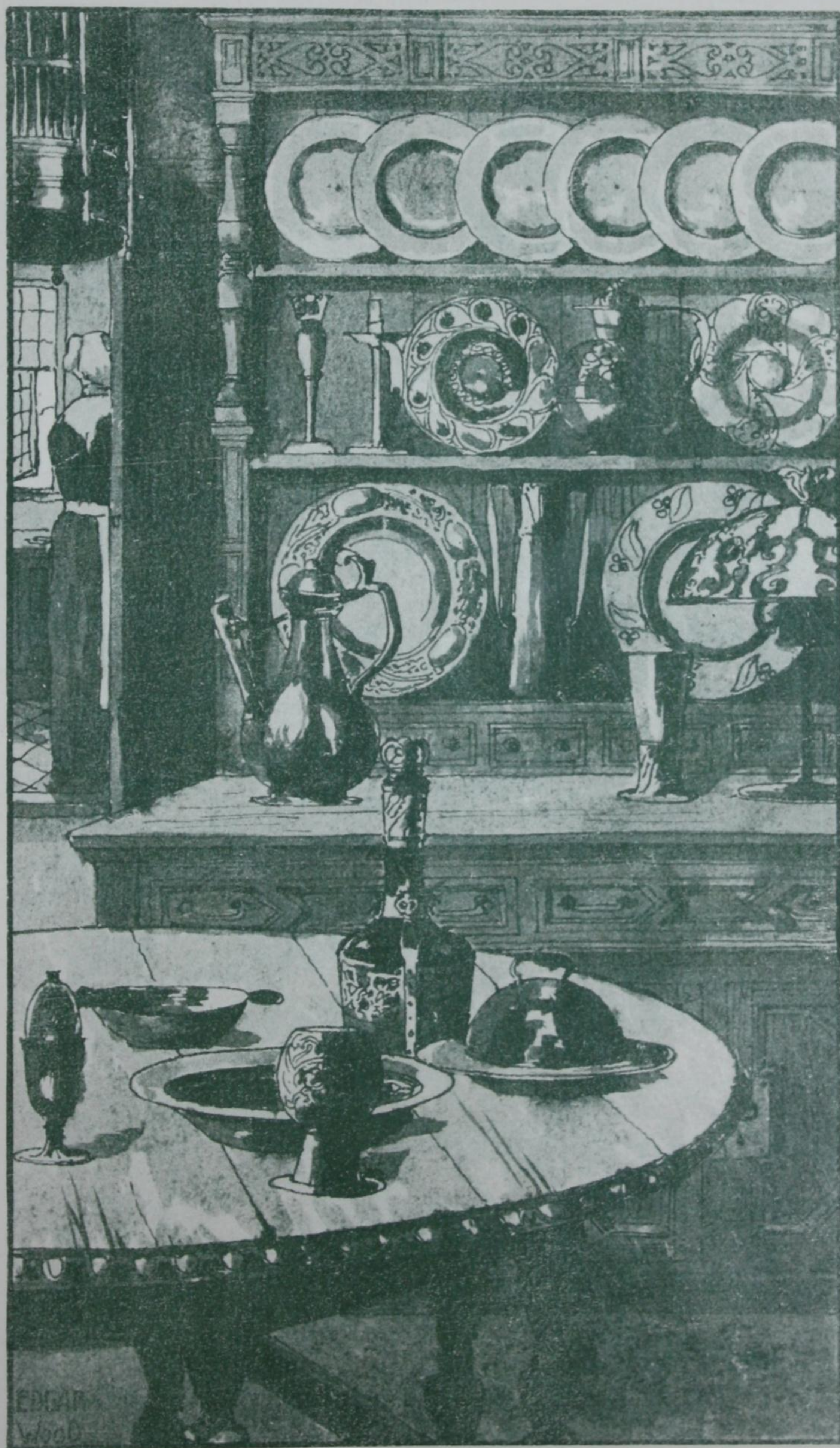


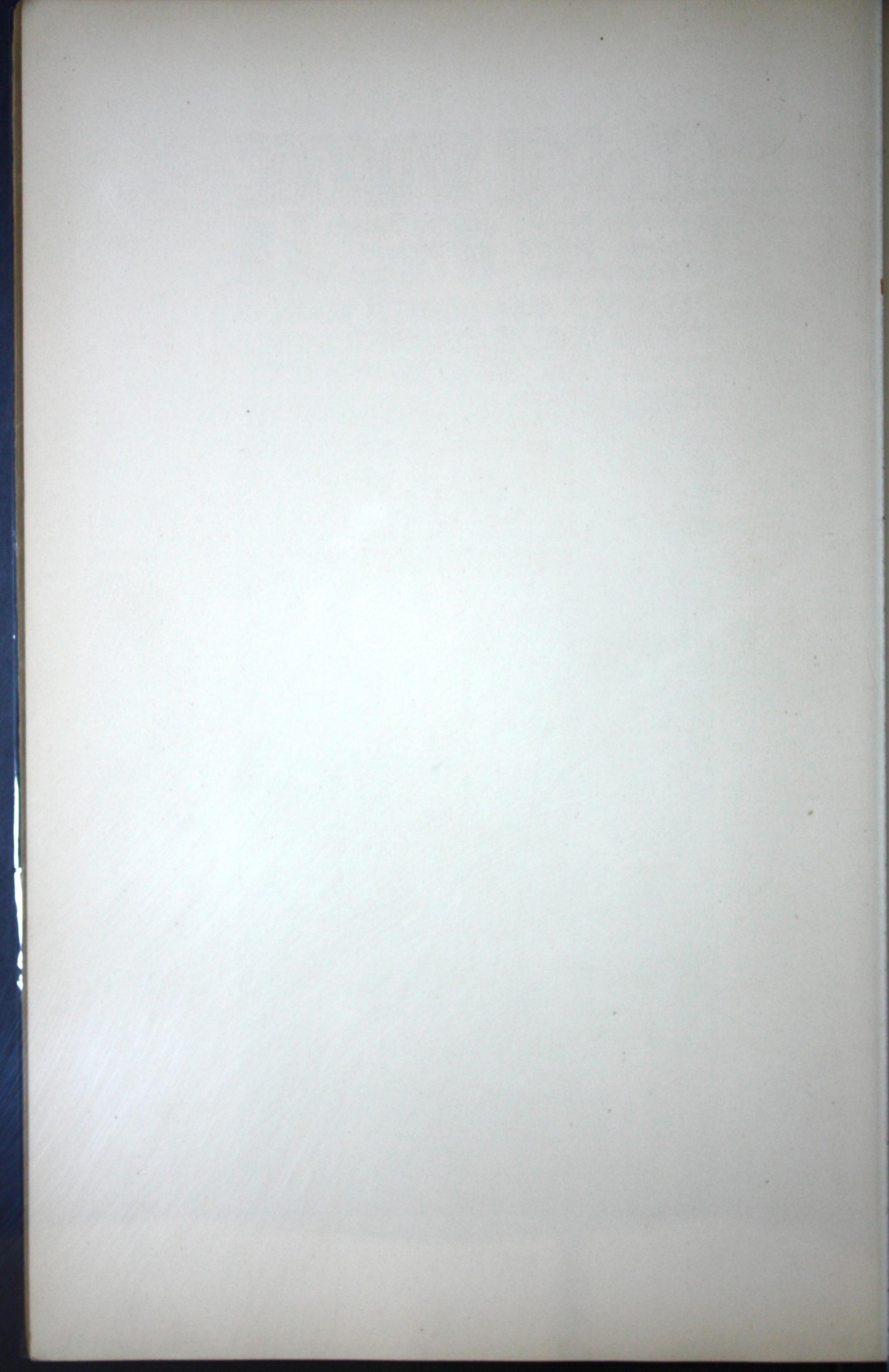
GEORGE WRAGGE

Wardro metal
works Salford
Manchester

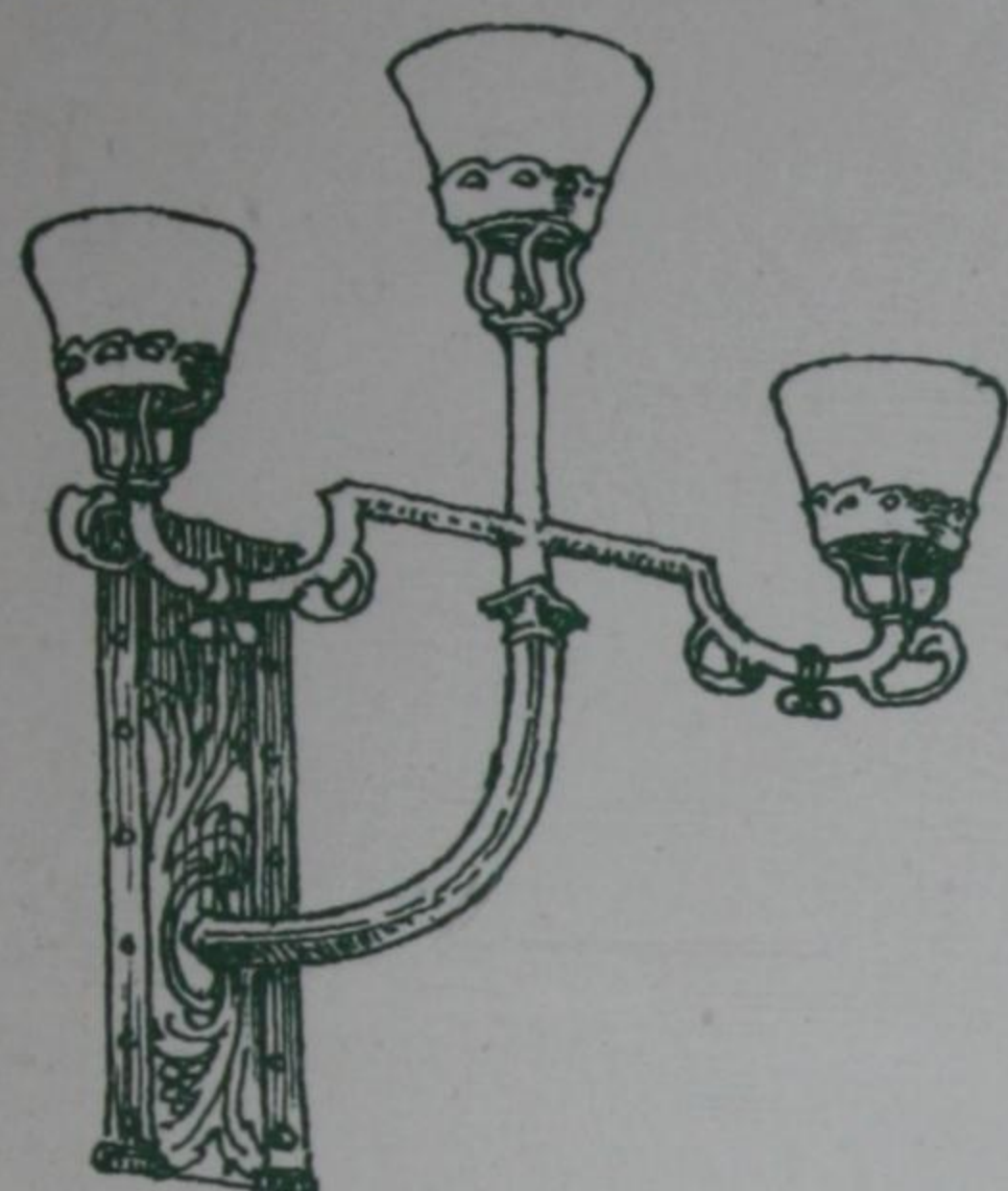
22 Surrey St
Strand
London W.C

REPOVSEE AND BEATEN WORK IN
PEWTER, LEAD, BRASS, COPPER, & OTHER
METALS FOR VARIOVS PURPOSES





Nº 800

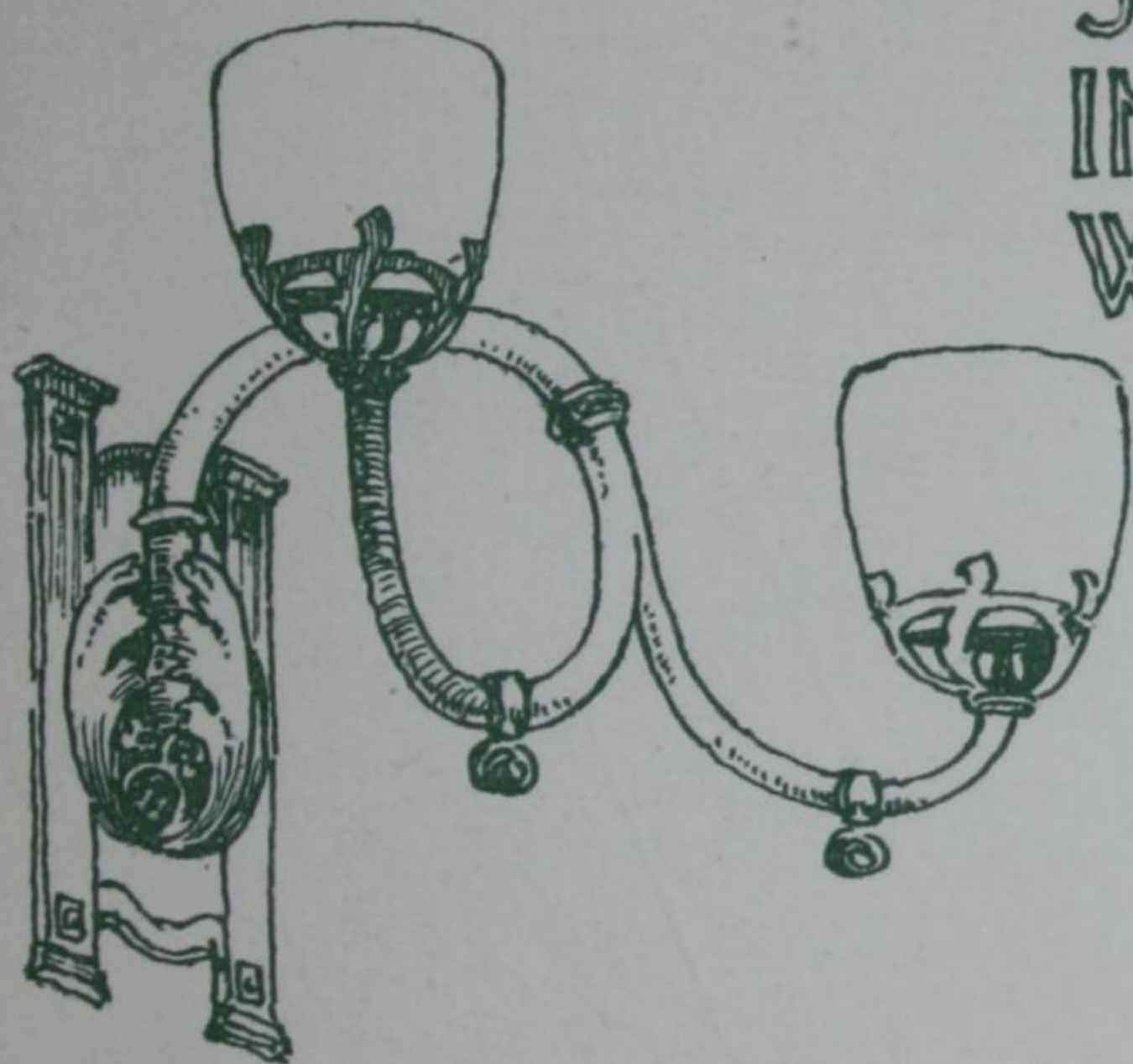
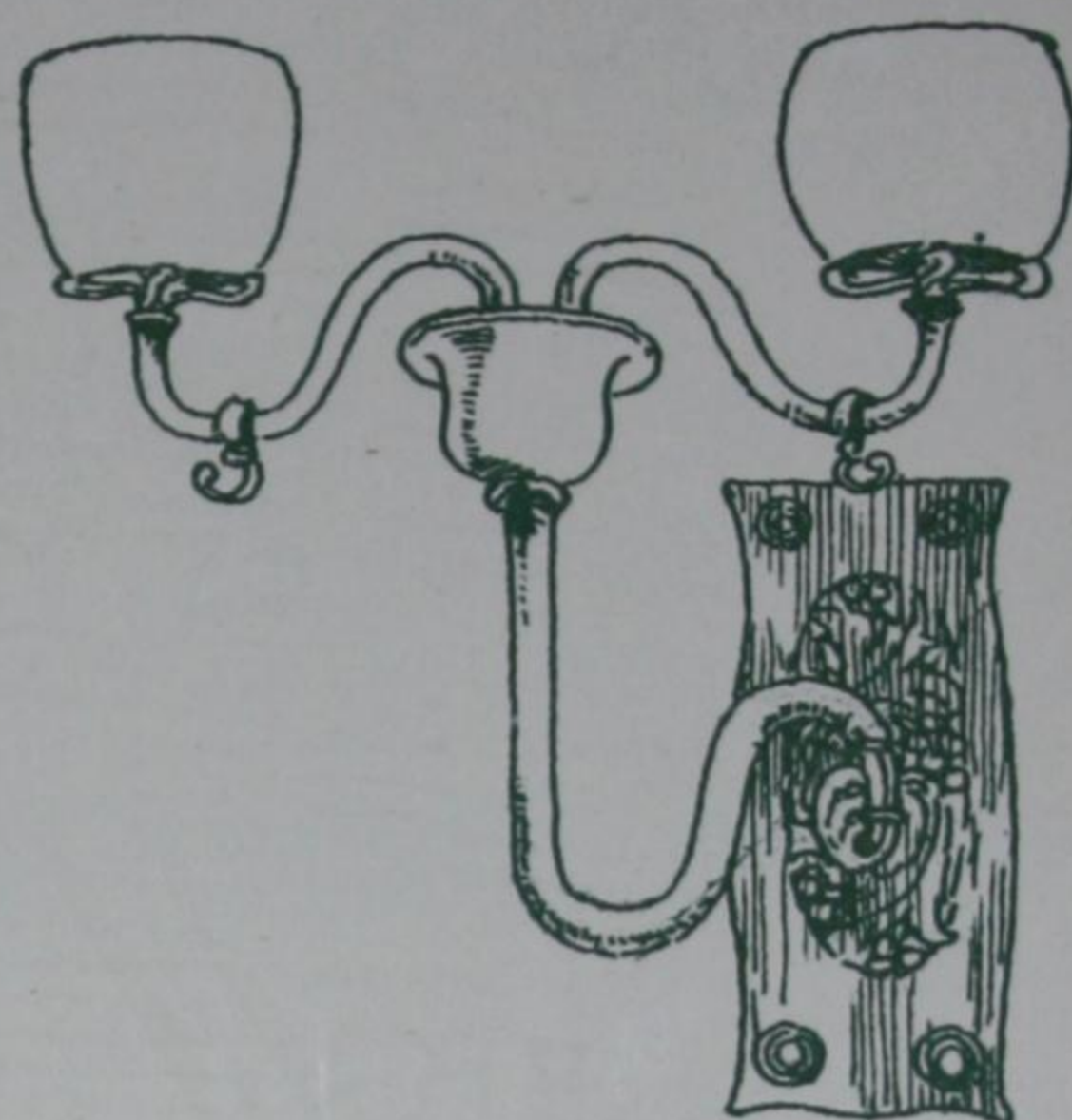


GEORGE WRAGGE

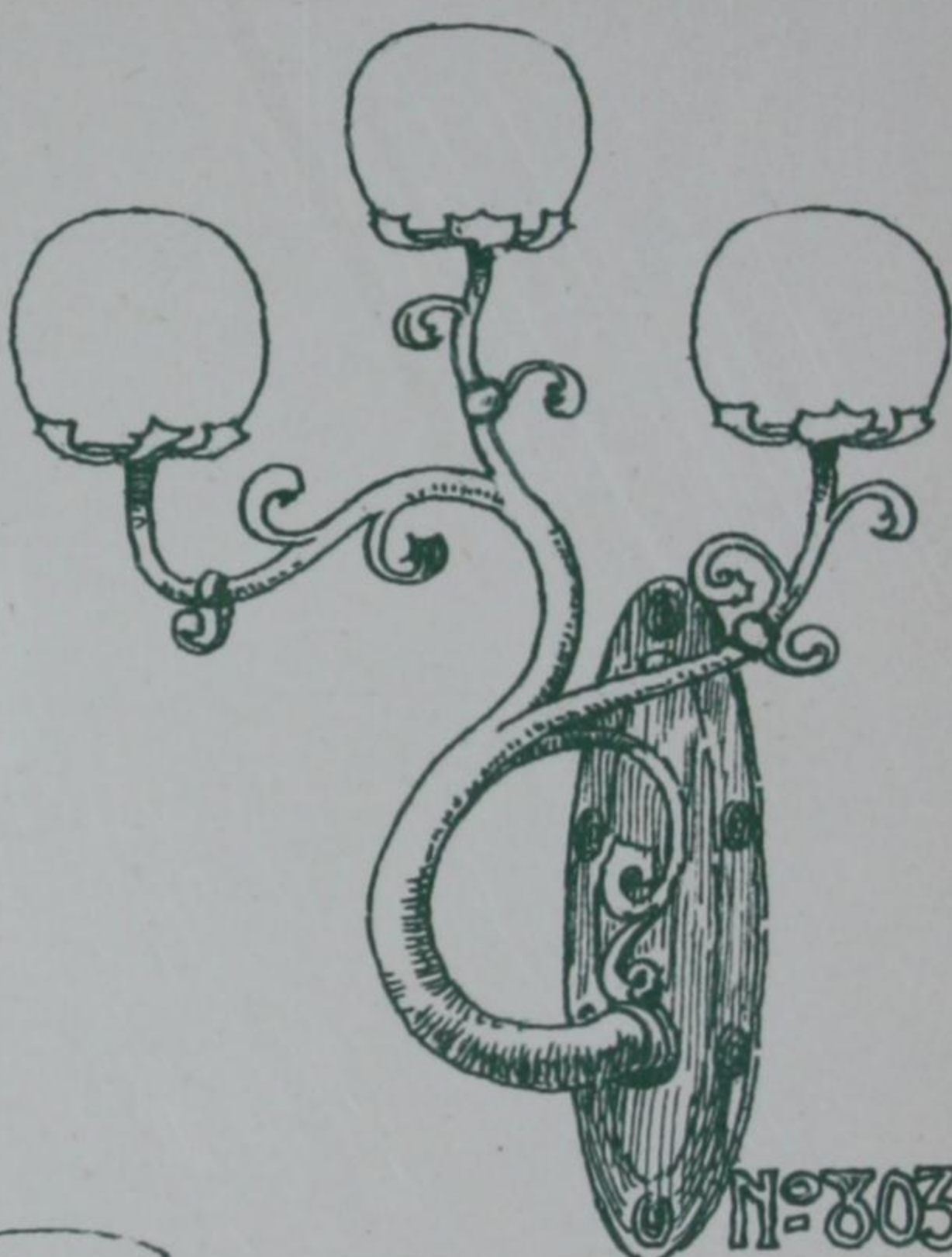
Wardry Metal
works Salford
Manchester
22 Surrey Street
Strand
London W.C.

GAS FITTINGS TO
SPECIAL DESIGNS
IN ANY METAL
WROUGHT OR CAST

Nº 801

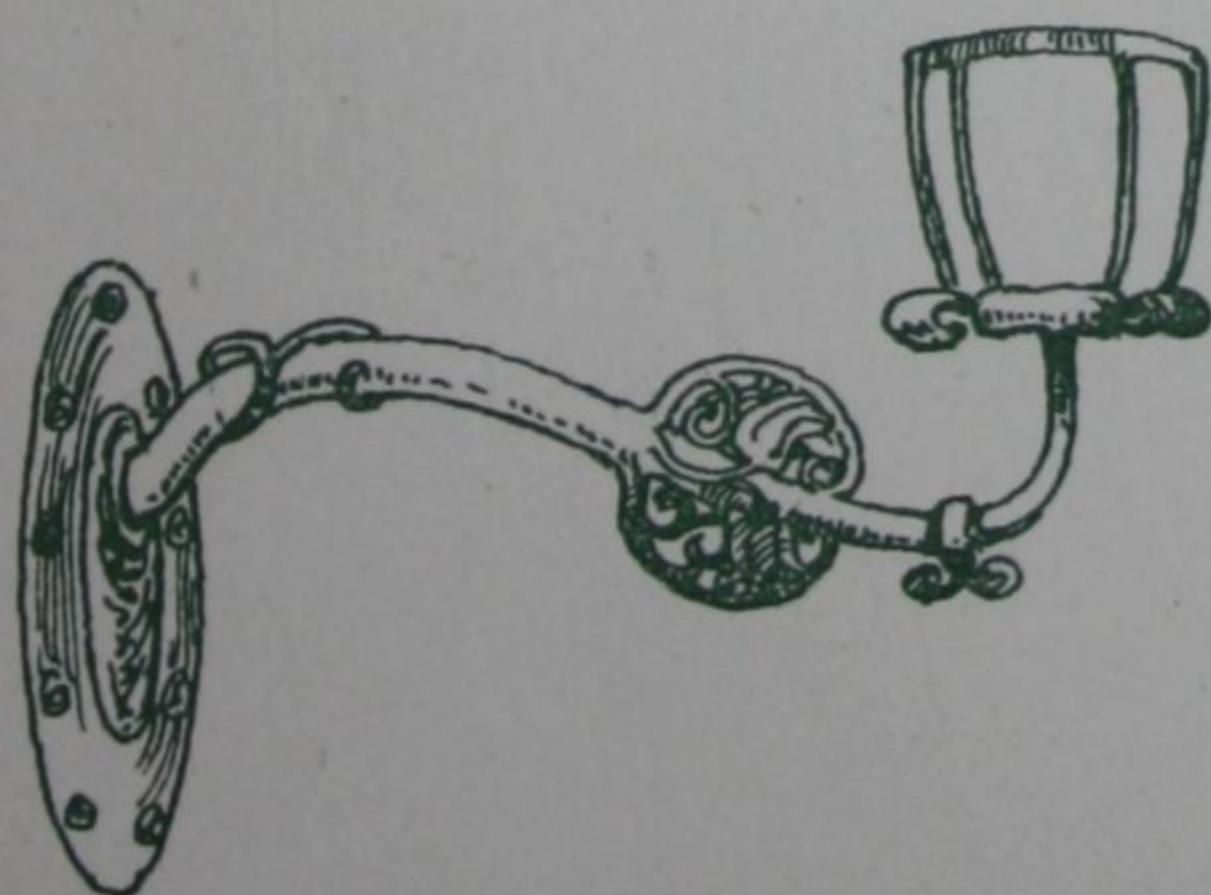
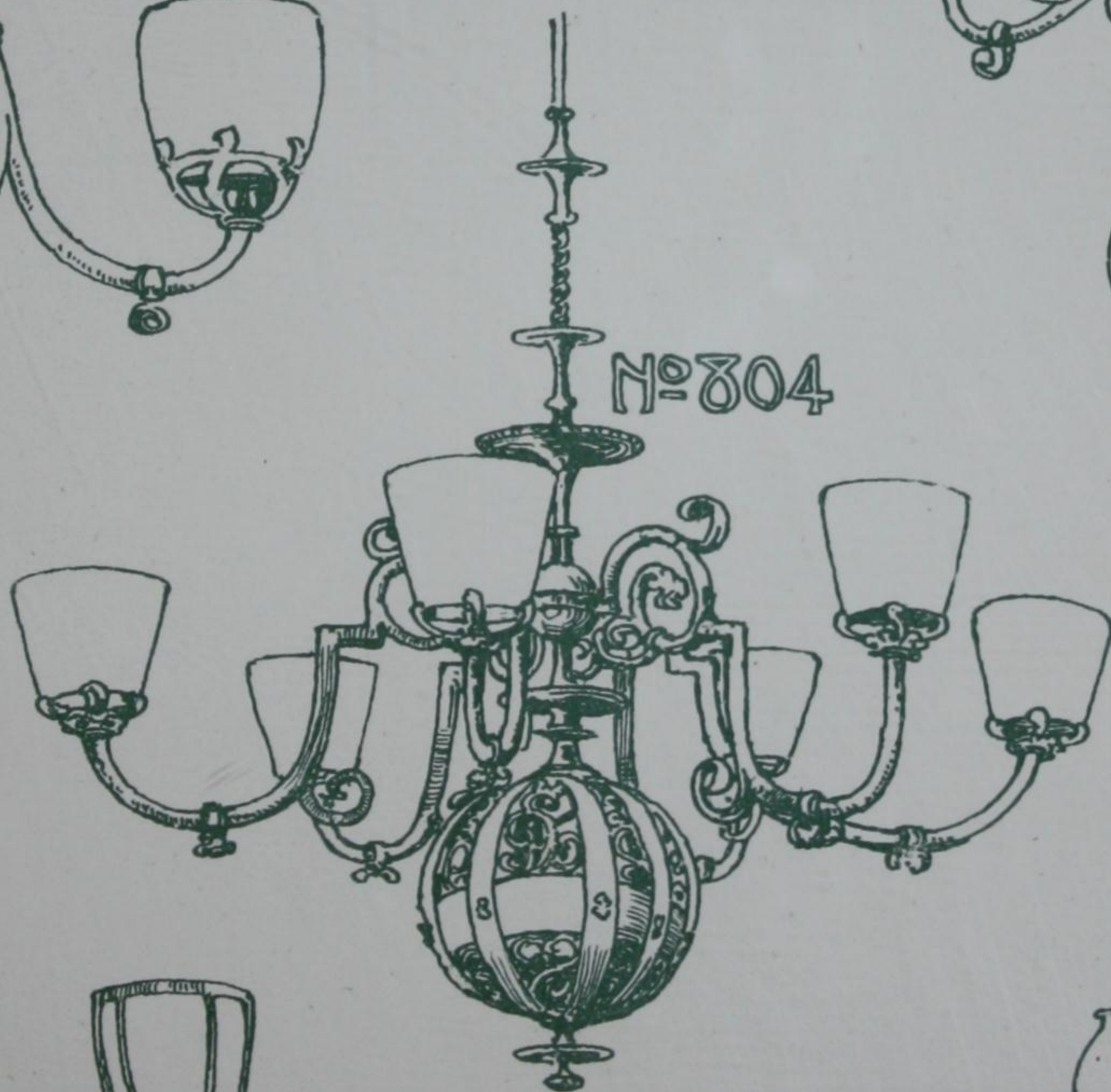


Nº 802

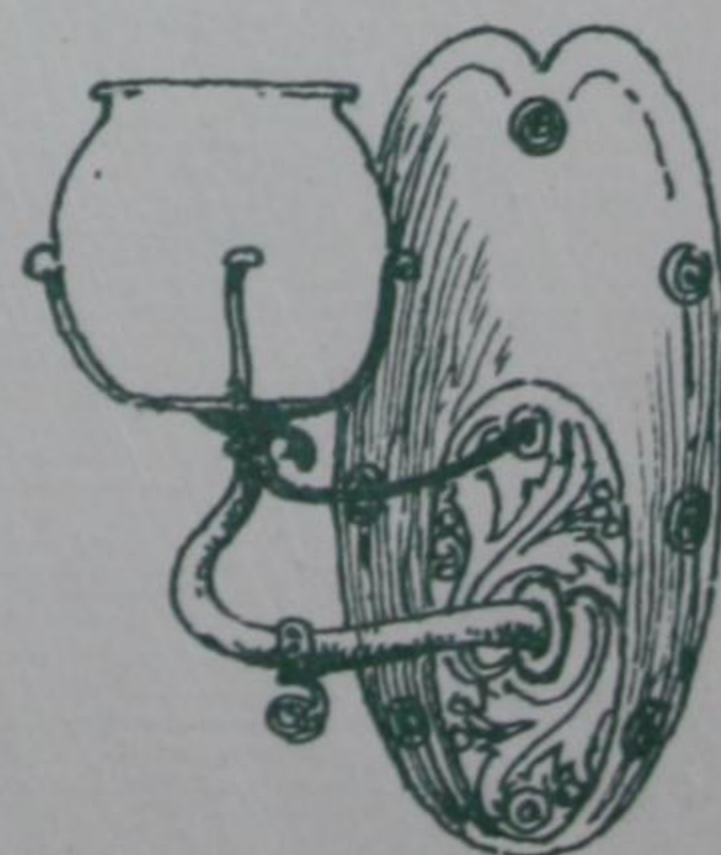


Nº 803

Nº 804

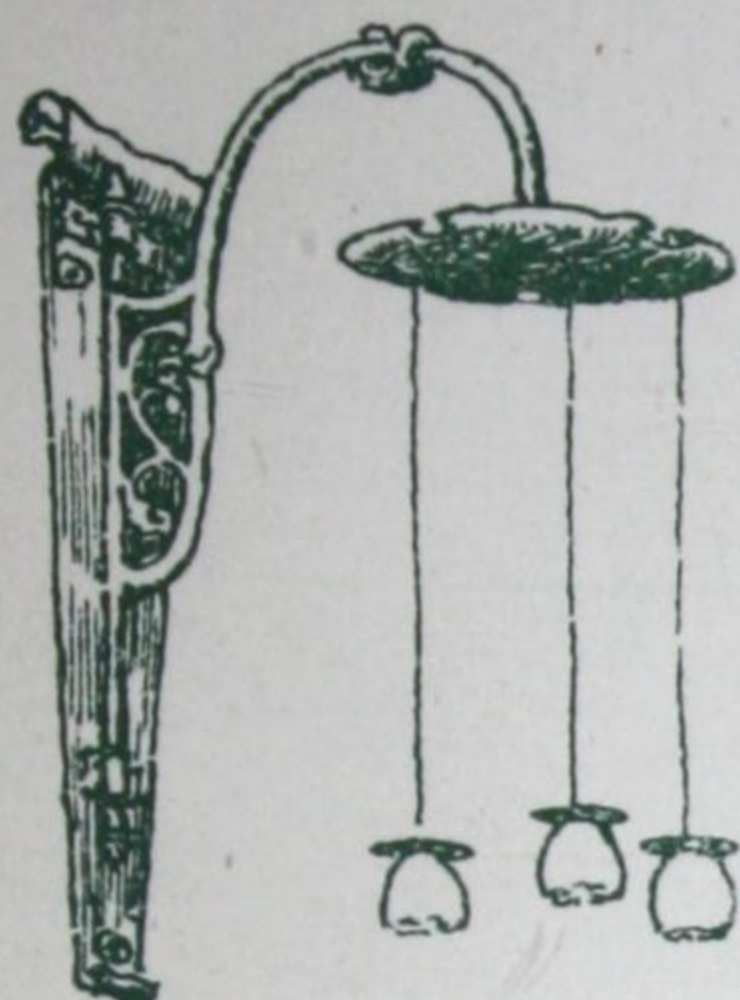


Nº 805



Nº 806

Nº700



GEORGE WRAGGE

Wardry metal
works Salford
Manchester

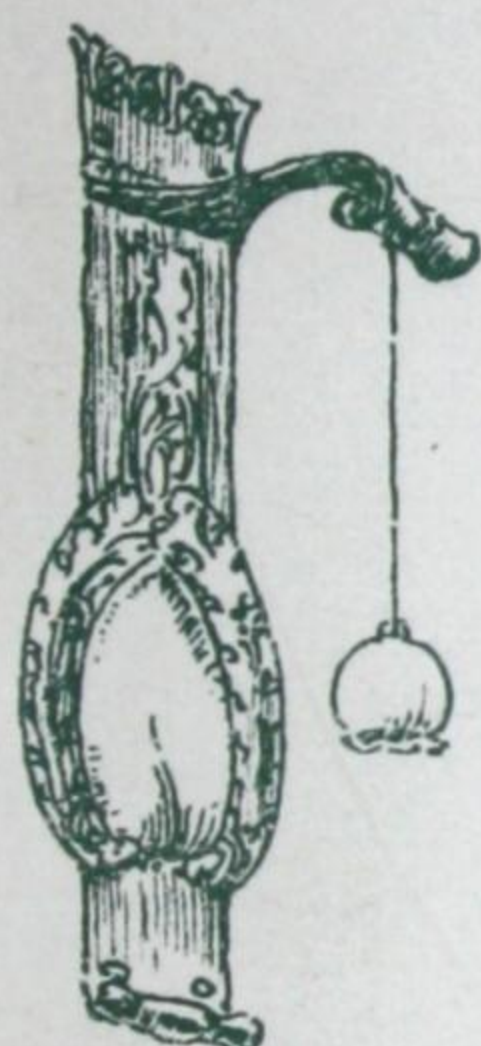
22 Surrey St
Strand
London W.C.

ELECTRIC LIGHT FITTINGS IN A
VARIETY OF METALS EITHER
HAMMERED OR CAST

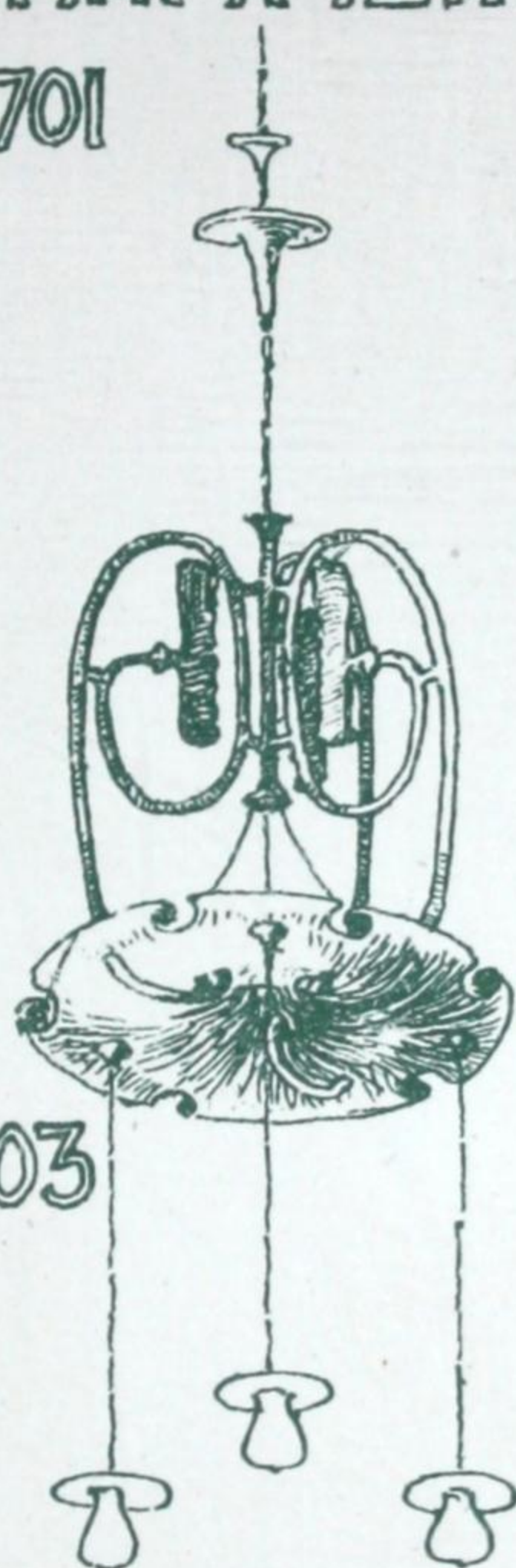
Nº701



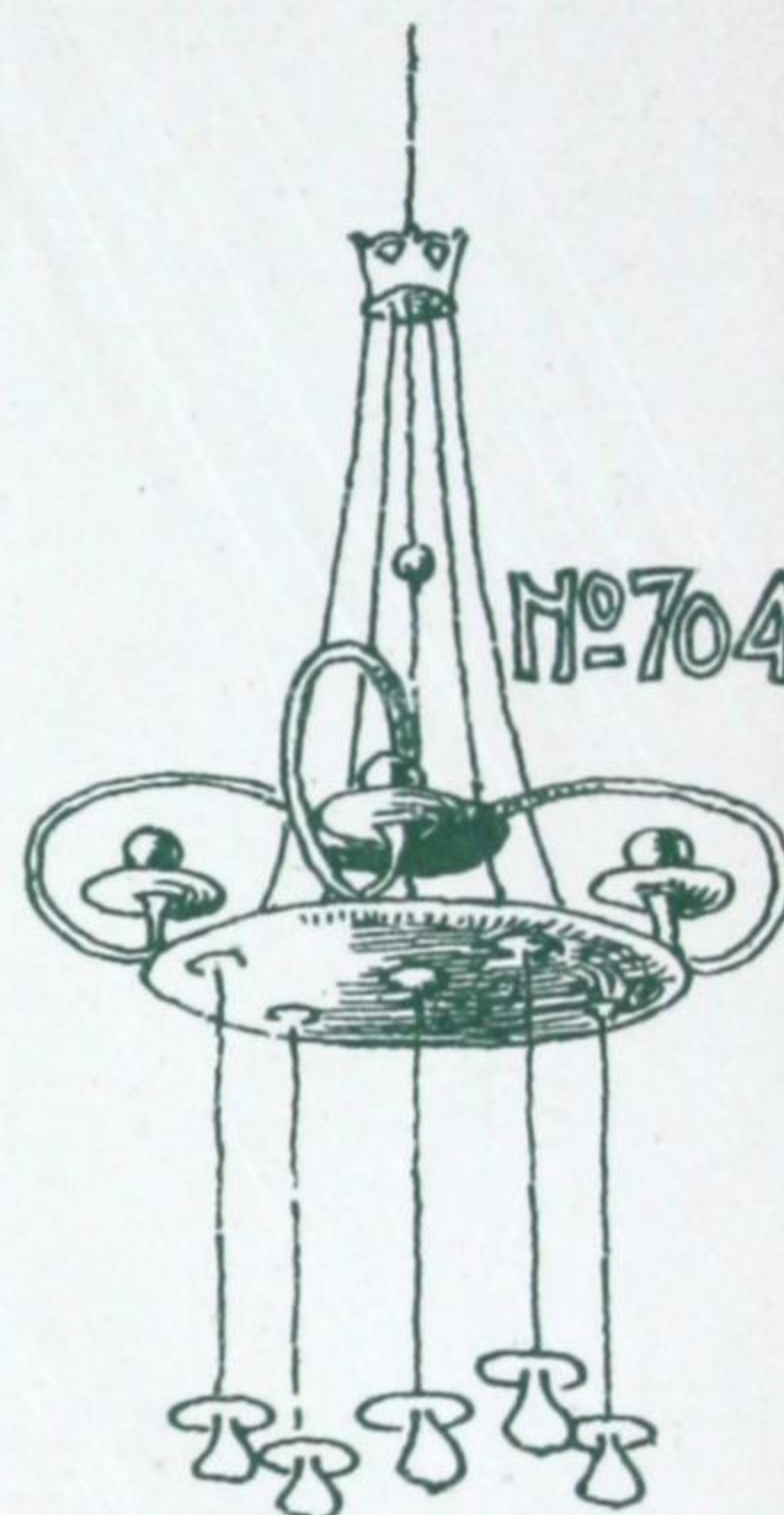
Nº702



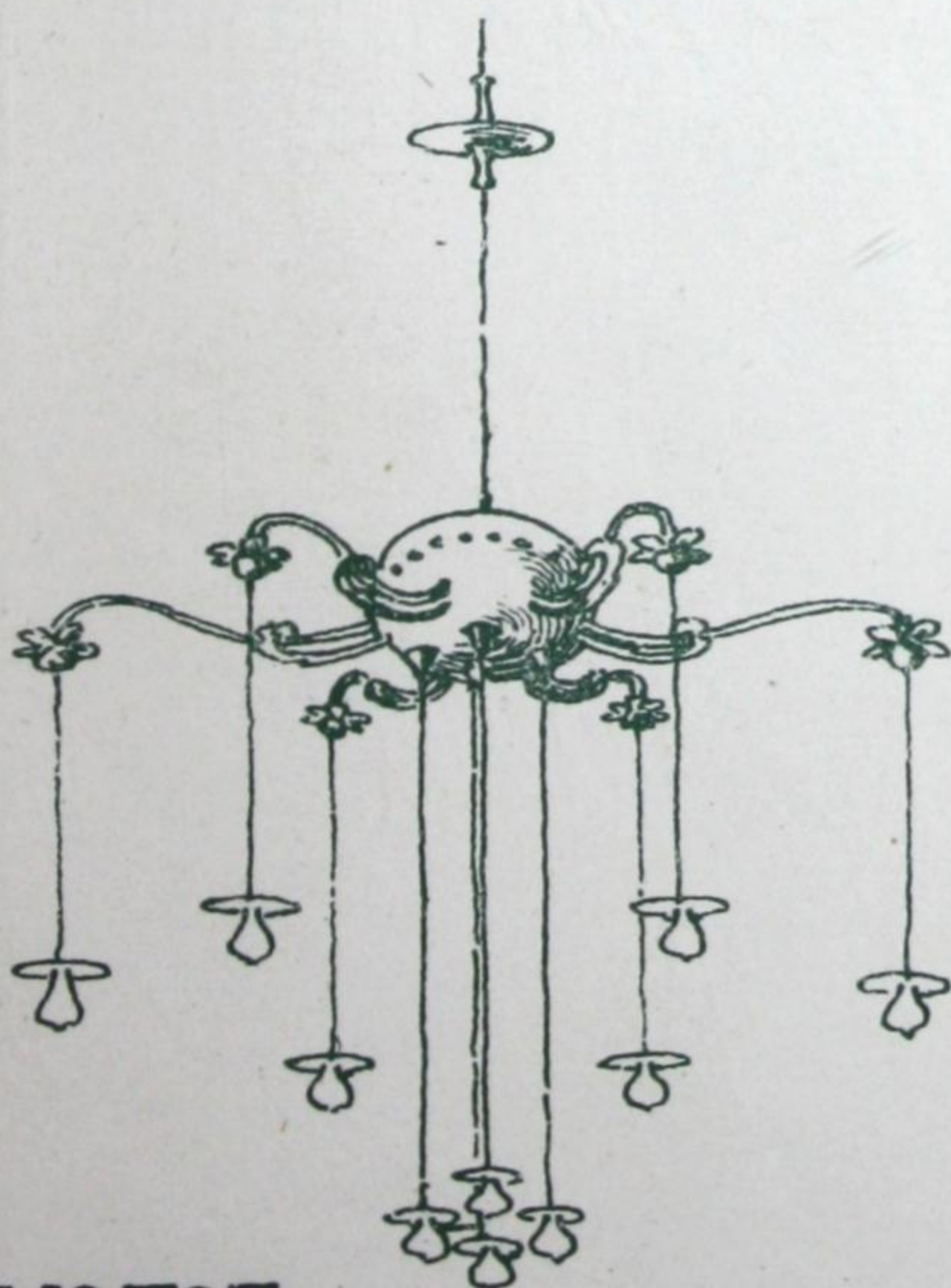
Nº703



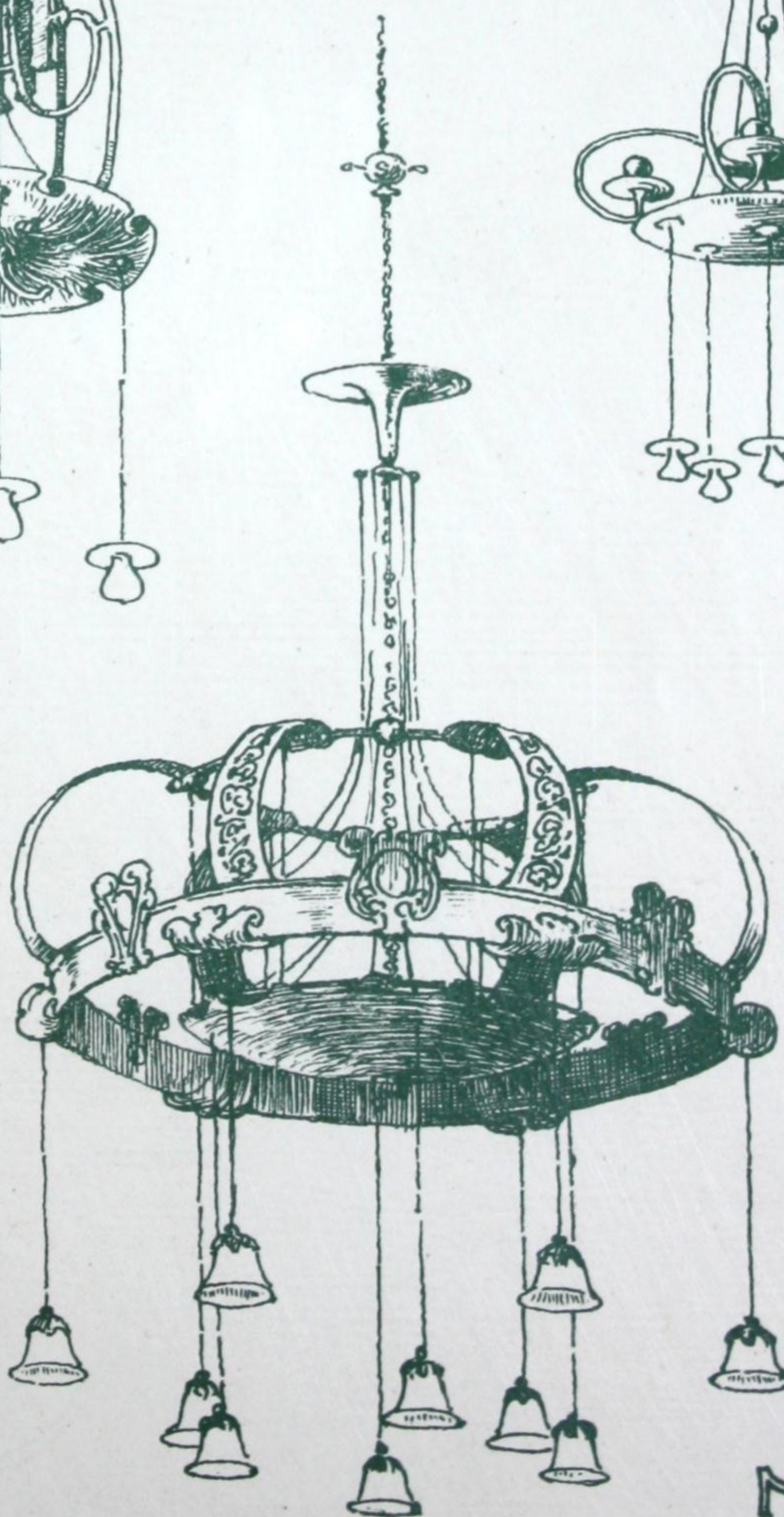
Nº704

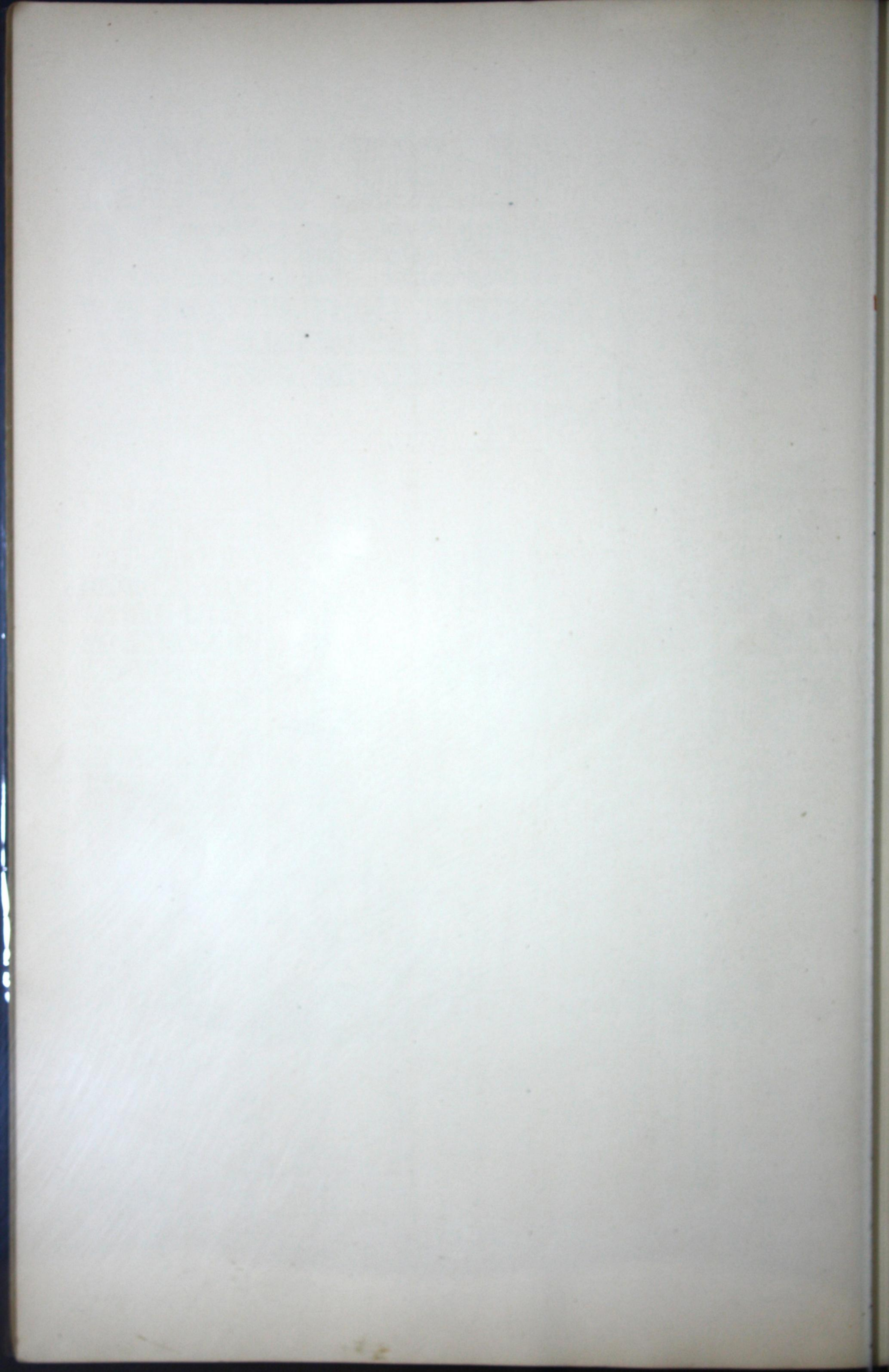


Nº705



Nº706



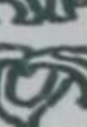

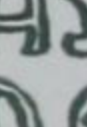
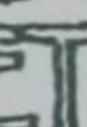


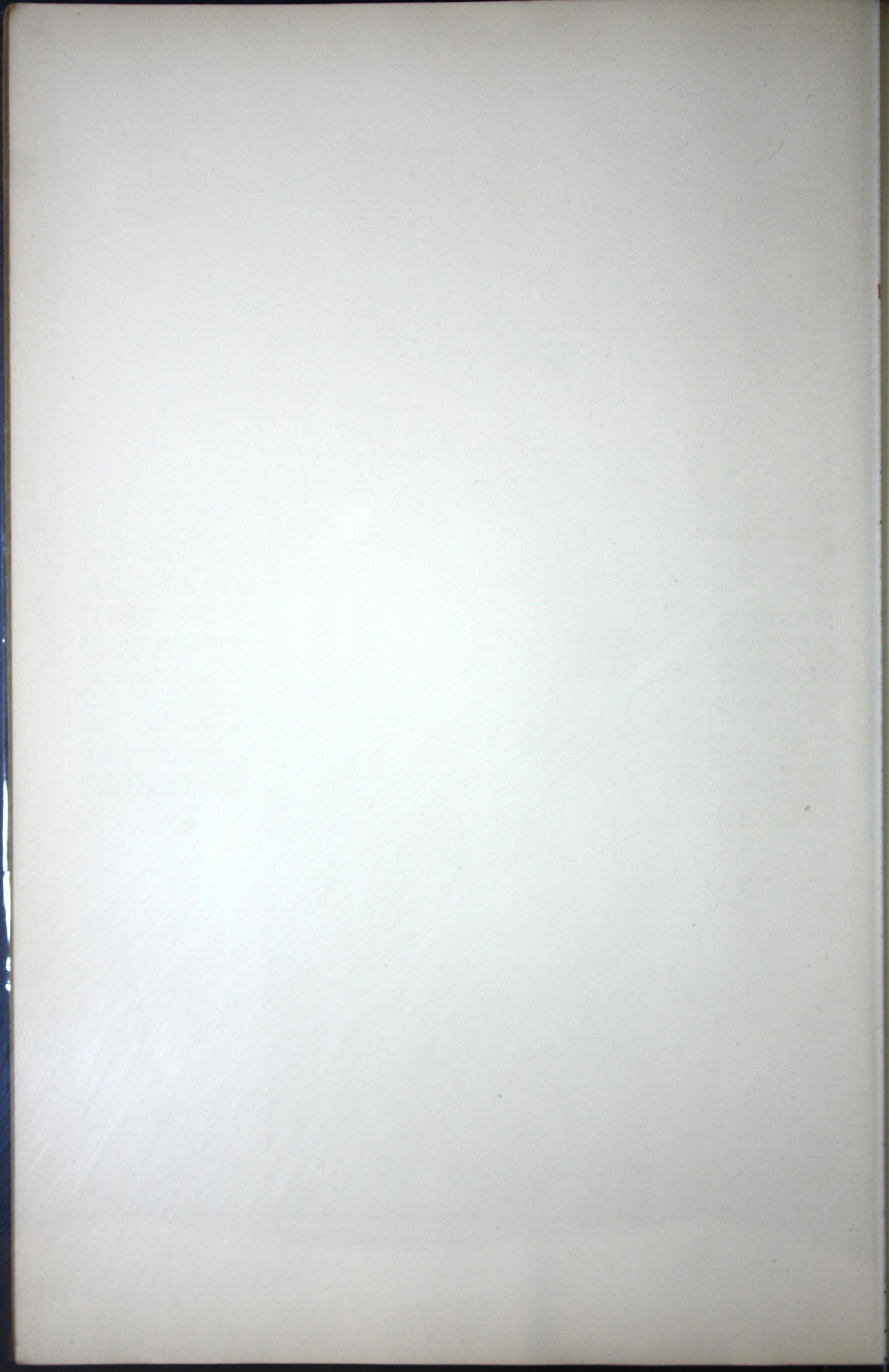
GEORGE WRAGGE

Wardry metal
works Salford
Manchester
22 Surrey St
Strand
London W.C.

HANGING LAMPS
TABLE LAMPS
BRACKET LAMPS
& OTHER SPECIAL
FORMS IN BRONZE
BRASS HAMMERED
IRON & VARIOUS
MATERIALS. 
GLASS & SHADES
FOR SAME. OF SPECIAL
DESIGN & COLOUR



CANDLESTICKS
CANDELABRA
CANDLE 
SCONCES AND
OTHER FORMS:
IN BRONZE 
 BRASS
HAMMERED 
IRON ETC ETC
SHADES OF SPECIAL
DESIGN & COLOUR



GEORGE WRAGGE

Wardry metal
works Salford
Manchester

22 Surrey St
Strand
London W.C.

MEMORIAL &
TABLETS IN
VARIOUS &
FORMS IN BRASS
BRONZE &
ALUMINIUM
COPPER SILVER
ETC & WITH REAL
ENAMELS &



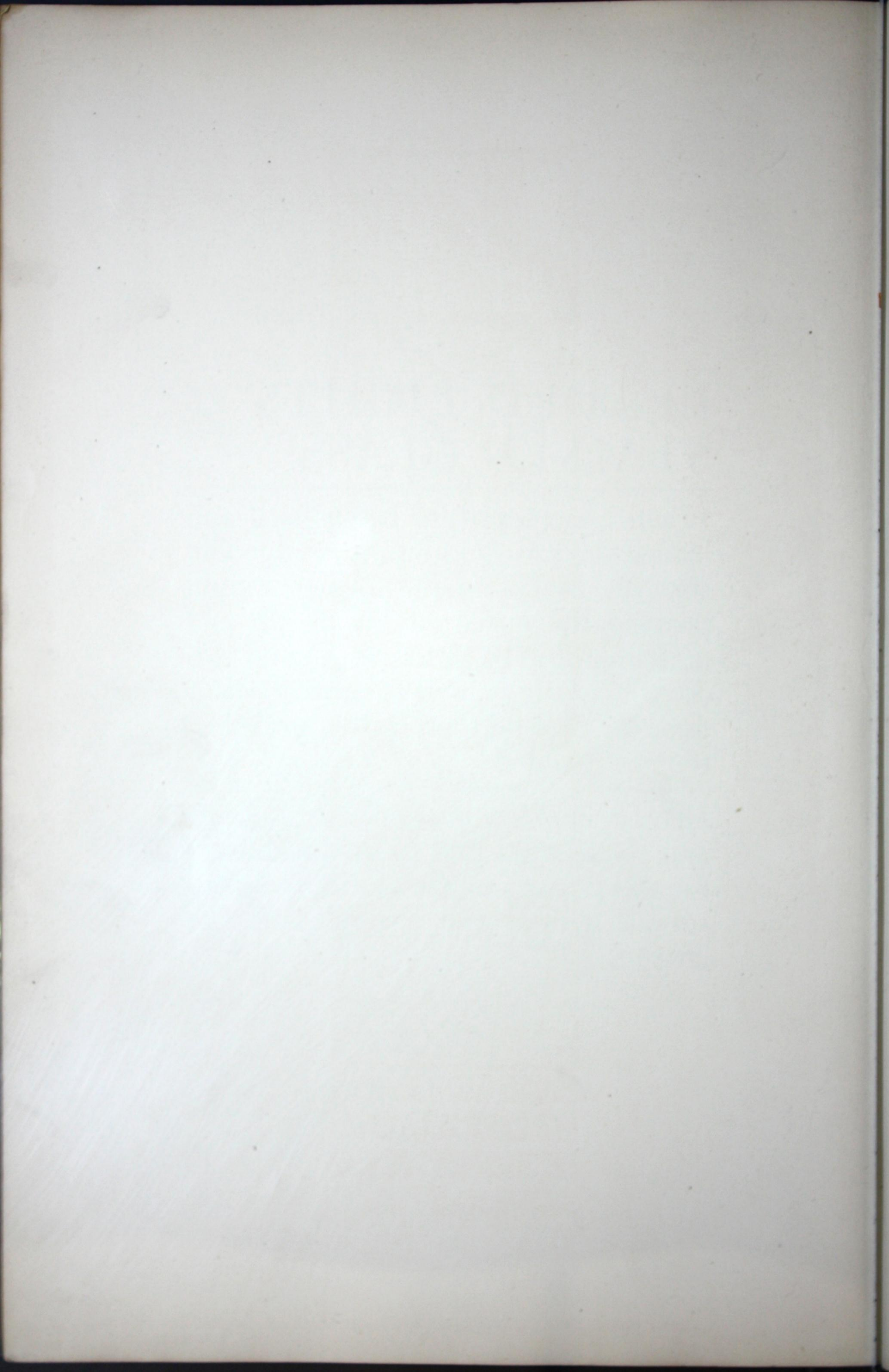
NAME PLATES
ENGRAVED:
CAST OR &
REPOUSSE
IN ANY METAL
DESIGNS &
SUBMITTED
FOR APPROVAL



LEADED LIGHTS & STAINED GLASS.

When Casements are being used and leaded work is required, it is advisable that the Maker of the former should provide the latter (if his design and craftsmanship be satisfactory), and also do the glazing; delays, wrong sizes, &c., &c., would thereby to a great extent be avoided.

I have a capable staff of Fixers & Glaziers and shall be pleased to give estimates for this portion of the work, as also to submit designs and examples free of charge.





STAINED:GLASS
 &:LEADED:LIGHTS
 DESIGNS:ON:2
 APPLICATION:

CHORLTON & KNOWLES, MAYFIELD PRESS, MANCHESTER, S.E.



Memorandum of the
Agreement between
Mexico and the U.S.



GEORGE WRAGGE

WARDRY: METAL
WORKS
SALFORD
MANCHESTER:

209 & 211: SHAFTESBURY
AVENUE:
OXFORD: LONDON: W.C.



METAL: CASEMENTS
AND FRAMES WROUGHT: IRON

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